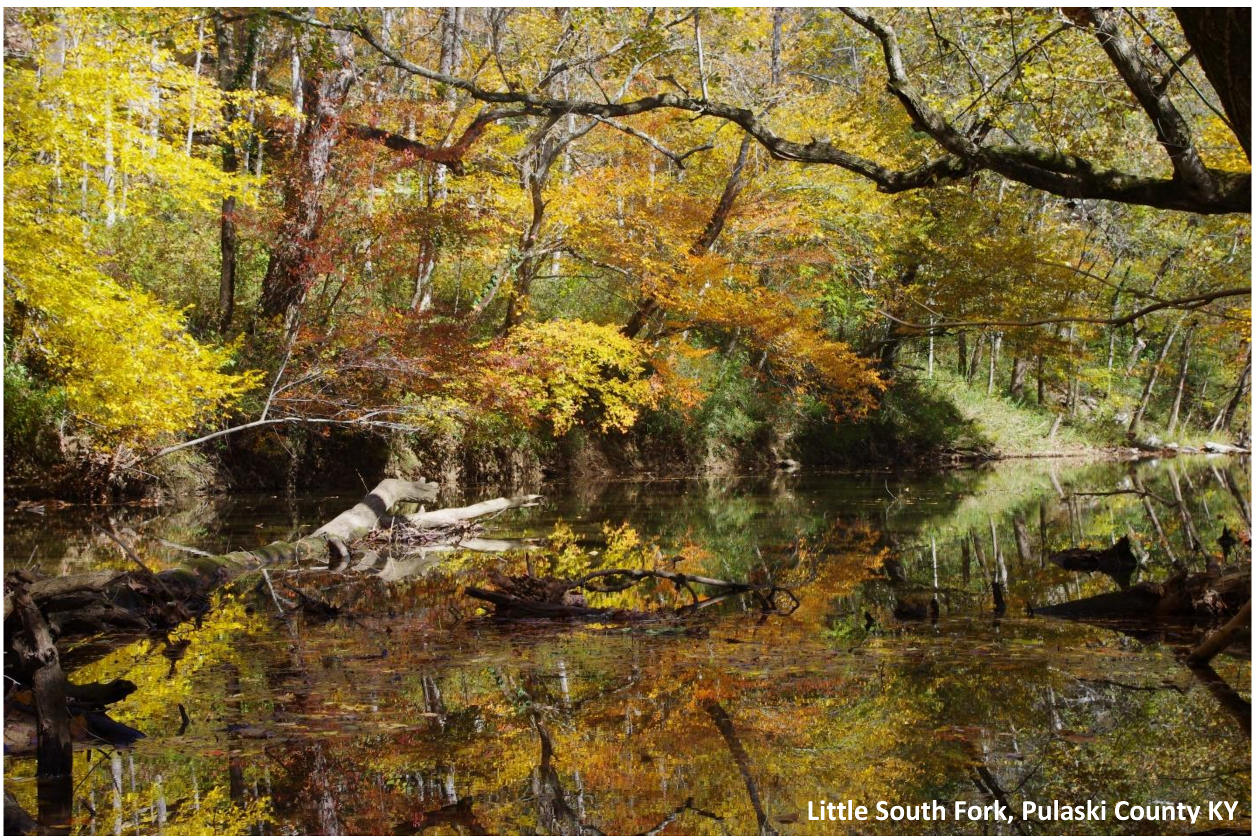
Integrated Report to Congress on the Condition of Water Resources in Kentucky, 2018 & 2020 Combined Cycle

Assessment Results with an Emphasis on the 1) Salt and Licking Rivers, 2) Upper Cumberland and Four Rivers (Lower Cumberland, Ohio River, Mississippi River and Tennessee River), and 3) Green and Tradewater Rivers, along with a Statewide Update



Kentucky Energy and Environment Cabinet
Department for Environmental Protection
Division of Water
Water Quality Branch
December 22, 2021

KENTUCKY ENERGY & ENVIRONMENT CABINET

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Assessment Results with an Emphasis on the 1) Salt and Licking Rivers, 2) Upper Cumberland and Four Rivers (Lower Cumberland, Ohio River, Mississippi River and Tennessee River), and 3) Green and Tradewater Rivers, along with a Statewide Update

This report has been approved for release:

Carey Johnson, Director

Kentucky Division of Water

December 22, 2021

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List of Acronyms

- ADB – Assessment Database
- ATTAINS – Assessment, TMDL Tracking, and Implementation System
- AU – Assessment Unit
- BMP – Best Management Practice
- BMU – Basin Management Unit
- CAH – Cold Water Aquatic Habitat
- CSO – Combined Sewer Overflow
- CWA – Clean Water Act
- CWSRF – Clean Water State Revolving Fund
- DOC – Division of Conservation
- DOW – Division of Water
- DQO – Data Quality Objective
- DWS – Domestic Water Supply
- DWSRF – Drinking Water State Revolving Fund
- EPA – Environmental Protection Agency
- ESRI – Environmental Systems Research Institute
- GIS – Geographic Information Systems
- HAB – Harmful Algal Bloom
- IR – Integrated Report
- KATTS – Kentucky's Assessment and TMDL Tracking System
- KPDES – Kentucky Pollutant Discharge Elimination System
- MRBI – Mississippi River Basin Initiative
- NPS – Nonpoint Source
- NRCS – Natural Resources Conservation Service
- NWQI – National Water Quality Initiative
- OE – Organic Enrichment
- ORSANCO – Ohio River Valley Water Sanitation Commission
- OSRW – Outstanding State Resource Water
- PCB – Polychlorinated Biphenyl
- PCR – Primary Contact Recreation
- PMP – Program Management Plan
- PSP – Project Study Plan
- REST – Representational State Transfer
- SCR – Secondary Contact Recreation
- SOP – Standard Operating Procedure
- SSO – Sanitary Sewer Overflow
- TDS – Total Dissolved Solid
- TMDL – Total Maximum Daily Load
- USACE – United States Army Corps of Engineers
- USGS – United States Geological Survey
- WAH – Warm Water Aquatic Habitat
- WQB – Water Quality Branch
- WQS – Water Quality Standards
- QA – Quality Assurance
- QAPP – Quality Assurance Project Plan

Notes for the Reader

If you are reading this, thank you for taking an interest in Kentucky's water resources.

A few important changes that occurred during this cycle are worth highlighting:

1. For the 2016 and previous Integrated Reports (IR), the Kentucky Division of Water (DOW) utilized the Assessment Database (ADB), a Microsoft Access database, to store designated use assessments and produce tables for the IR. In 2014, The U.S. Environmental Protection Agency (EPA) began redesigning the Assessment, TMDL Tracking, and Implementation System (ATTAINS). As of the 2018 cycle, EPA no longer supported ADB for IR submittal. As a result, Kentucky DOW developed its own state-specific assessment application, called the Kentucky's Assessment and TMDL Tracking System (KATTS), using money received from an Exchange Network grant. The KATTS application provides state specific needs for the assessment and Total Maximum Daily Load (TMDL) programs, and was used to submit 305(b) data and supporting documentation directly to ATTAINS for this 2018/2020 IR cycle.
    a. Because of this shift in applications, every assessment unit on Kentucky's 2018/2020 305(b) list was given a new assessment unit ID.
        i. The assessment unit modification spreadsheet defines the rename of the old assessment unit IDs and the new assessment unit IDs. This same spreadsheet can be used when reviewing assessment units that were split from their extent on the 2016 305(b) list.
2. During this 2018/2020 IR, spring assessment units were changed from points to polygons. The assessment unit is now represented by a springshed, or spring basin, with its units being in acres.
3. Fecal coliform criteria for primary contact recreation (PCR) were retired in 2019. Therefore, fecal coliform listings for the PCR designated use were replaced with pathogens or *E. coli*.
4. In previous cycles, Kentucky had a state-specific category of 5b, which was defined as 'segment does not support designated uses based on evaluated data, but based on Kentucky listing methodology, insufficient data are available to make a listing determination. No TMDL needed.' These waters had no instream data to confirm the attainment, but were suspected as impaired based on discharge monitoring report data. With the development KATTS, we now flag these waters as category 3 with a facility parameter status, where they are tracked and prioritized for instream monitoring to confirm the suspected impairment.

If you have any questions about this report, the 305(b) list, the 303(d) list, the assessment program, or the TMDL program in Kentucky, please email TMDL@ky.gov.

Acknowledgements

Many individuals and organizations contribute to the assessment process, and it is by no means a solo endeavor. Thank you to all those that contributed data, information, and assessment recommendations. Specifically, I would like to thank all the staff in the Water Quality Branch for embracing a new system and so eagerly providing valuable expertise through the scorecard process. Your dedication to the efforts of monitoring and assessing the waters of the Commonwealth is greatly appreciated. I would also like to thank all the staff in the Watershed Management Branch for their dedication to accurate geospatial data and their contributions to QAQC and public communication.

Executive Summary

The 2018/2020 Combined Cycle Integrated Report (IR) was prepared by the Kentucky Division of Water (DOW), Department for Environmental Protection (DEP), for submittal to the U.S. Environmental Protection Agency (EPA) to fulfill requirements of sections 303(d), 305(b), and 314 of the Federal Water Pollution Control Act (or Clean Water Act (CWA)) of 1972, as subsequently amended. Section 305(b) of the Act requires states to assess and report current water quality conditions to EPA every two years.

In conjunction with this IR document, an Integrated Report site has been developed to promote public engagement. To create the IR site, an Environmental Systems Research Institute (ESRI) ArcGIS (Geographic Information System) Hub was used to communicate assessments results from the 2018/2020 305(b) using representational state transfer (REST) services, online maps, ArcGIS dashboards, and story maps. The IR site also has information on topics ranging from designated uses (e.g., swimming and fish consumption), assessment categories, monitoring programs, and methodologies used for determining designated use attainment.

Designated Uses

All waterbodies in Kentucky have uses for the management and goal of attaining a minimum level of water quality. Designated uses are promulgated in 401 KAR 10:026 and the implementing (enabling) criteria are in 401 KAR 10:031. The following are applicable designated uses:

- Cold water aquatic habitat (CAH)
- Warm water aquatic habitat (WAH)
  - CAH and WAH are commonly referred to as the aquatic life designated use, and are referenced as such throughout this IR
  - Rivers and streams are either WAH or CAH
  - Lakes and reservoirs designated as CAH are both CAH and WAH
- Primary contact recreation (PCR)
- Secondary contact recreation (SCR)
- Domestic water supply (DWS)
- Outstanding state resource water (OSRW)
- Fish consumption[1]

With the exception of CAH and OSRW, the remaining designated uses apply by default to all waterbodies.

Monitoring

The Kentucky DOW uses information collected by biologists and scientists to perform assessments on waterbodies to determine if that waterbody is meeting water quality standards and therefore supporting its designated use(s). The DOW operates its primary monitoring programs with a Watershed Management Framework Initiative implemented in 1998, where Basin Management Units (BMU) are sampled on a five-year rotation. Beginning in 1998, waterbodies have been sampled in the following order: 1) Kentucky River, 2) Salt and Licking Rivers, 3) Upper Cumberland and Four Rivers (Lower

[1] Fish consumption is not a designated use, but is assessed as such and therefore included in this list.

Cumberland, Ohio River, Mississippi River and Tennessee River), 4) Green River and Tradewater River, and 5) Big Sandy River, Little Sandy River and Tygart's Creek. Ohio River minor tributary basins are assigned to the BMU of adjacent major river basins and are sampled in the same year as the rest of the BMU.

This IR represents monitoring efforts from the Salt and Licking Rivers BMU, sampled in 2014, Upper Cumberland and Four Rivers BMU, sampled in 2015, and Green and Tradewater Rivers BMU, sampled in 2016. This report also incorporates assessment data and results from monitoring that occurred during this reporting cycle (2014 – 2016) outside of the BMUs of focus by programs such as total maximum daily load (TMDL), nonpoint source (NPS), and fish tissue. For some programs, if more recent data were available, they were used in addition to the reporting cycle monitoring years.

Assessment

Before data are used in the assessment process, they are reviewed to ensure data are of sufficient quantity and quality to make designated use attainment decisions. Of the nearly 1,500 stations that were reviewed for assessment purposes, 1,106 stations had data of sufficient quantity and quality and were used to complete 915 assessments (Table 1).

Table 1. Number of samples collected and analyzed per data type where the data were used for assessment during this 2018/2020 Integrated Reporting cycle.

Water Chemistry Samples	Bacteria Samples	Chlorophyll-a Samples	Macroinvertebrate Samples	Tissue Samples	Fish Samples
4,233	1,713	401	352	153	133

To complete assessments, available data are summarized and analyzed to make final attainment decisions, which are reported in the 305(b), the 303(d), and discussed within this IR. When sampling occurs, specific information is gathered for each designated use.

- To assess PCR - bacteria levels are examined during the recreation season (May – October)
- To assess aquatic life for streams - water chemistry, habitat, and biological communities are examined
- To assess aquatic life for lakes - profile data, chlorophyll-a, and water chemistry data are examined
- To assess fish consumption – fish are collected where their tissue (usually filet) is examined for pollutants of concern, such as mercury and polychlorinated biphenyl (PCB)

For more detailed information about Kentucky's assessment and listing methodology, refer to the Consolidated Assessment and Listing Methodology (CALM): Surface Water Quality Assessment in Kentucky, the Integrated Report (KDOW 2015). In addition to this document, an update to Kentucky's Assessment Methodology for Fish Consumption (KDOW 2020) is considered an addendum to the CALM, and should be used in place of the fish consumption method outlined in section 3.6 on page 55 of the 2015 CALM document.

Categories and Attainment

The 305(b) list is a list of all waterbodies that have been assessed for one or more designated uses. Waterbodies on the 305(b) list are put into different categories depending upon the assessment decision made for that waterbody. Categories are assigned at the parameter level, which is the level that data are collected and analyzed, the designated use level, which is the level that the water quality standards for a particular parameter apply, and the assessment unit level, which is determined from the assessed designated uses and their categories (Figure 1).

Impaired waters are those waters found to partially support or not support one or more of its designated uses due to either a pollution or a pollutant. The 303(d) list, which is a subset of the 305(b) list, is only those waters in category 5, where the cause of impairment is identified as a pollutant and a TMDL is required (Figure 1).

	Category	Category Description	
305(b) List	1	Assessment unit supports all designated uses	Meeting Water Quality Standards
	2	Assessment unit supports designated use(s), but not all designated uses assessed	
	2b	Assessment unit currently supports designated use(s), but 303(d) listed and proposed to EPA for delisting	
	2c	Assessment unit supports designated use(s), and has an EPA approved or established TMDL	
	3	Designated use(s) has/ have not been assessed (insufficient information or no data)	
	4a	Assessment unit does not support designated use(s), and has an EPA approved or established TMDL	Impaired; Not Meeting Water Quality Standards
	4b	Assessment unit does not support designated use(s), and has an approved alternative pollution control plan stringent enough to meet water quality standard(s) within a specified time.	
	4c	Assessment unit does not support designated use(s), but is not attributable to a pollutant or a combination of pollutants.	
303(d) List	5	Assessment unit does not support designated use(s), and is attributable to a pollutant or a combination of pollutants. TMDL required.	

Figure 1. Category definition at the assessment unit level.

Results

305(b) Results

The 305(b) list is an inventory of all waterbodies that have been assessed for at least one designated use from this cycle and all prior cycles. The spatial extent of each assessment unit is identified within the list. Kentucky's 2018/2020 305(b) list has 2,879 assessment units, representing 13,061.6 river miles, 203,310 lake/reservoir acres, and 168,055 springshed acres. The 305(b) workbook has a tab for the 305(b) list, the 303(d) list, new listings (cycle first listed 2020), pollutants proposed to EPA for delisting, waters with a TMDL, and impaired waters.

Designated Use Level (all waterbody types)

For all 2,879 assessment units on the 2018/2020 305(b) list, regardless of waterbody type, attainment per designated use is displayed in Figure 2.

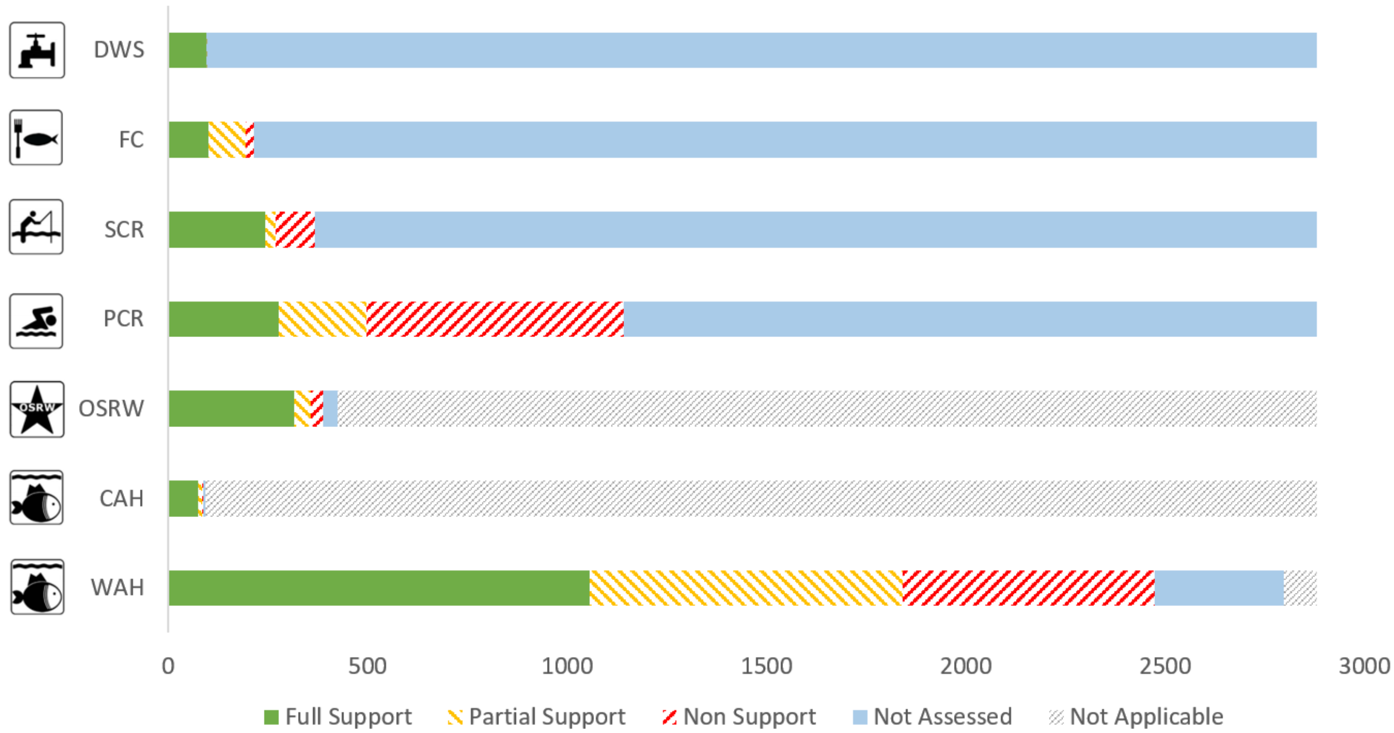

Figure 2. Assessment status and attainment for all 2,879 assessment units on the 2018/2020 305(b) per designated use.

Warm Water Aquatic Habitat

On the 2018/2020 305(b) list, 2,472 assessment units have been assessed for the WAH designated use, making it the most commonly assessed designated use on the 305(b) list. Of those assessed, 1,057 fully support the WAH designated use, while 1,415 are impaired. River and stream assessment units represent 2,374 of the assessment units, of which 998 are meeting and 1,376 are impaired. Lake and reservoir assessment units represent 97 of the assessment units, of which 58 are meeting and 39 are impaired (Figure 3).

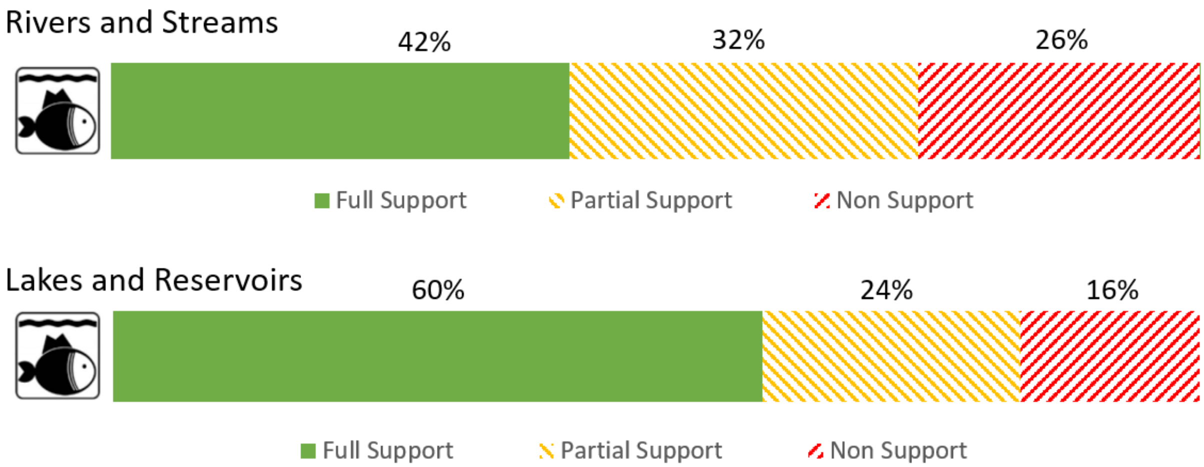

Figure 3. Proportion of rivers/streams and lakes/reservoirs assessed as full support, partial support, or nonsupport of those waterbodies assessed for the **WAH** designated use.

Cold Water Aquatic Habitat

On the 2018/2020 305(b) list, 92 assessment units have the CAH designated use, 88 of which have been assessed. River and stream assessment units represent 78 of the assessed assessment units, of which 65 are meeting and 13 are impaired (Figure 4). Lake and reservoir assessment units represent 10 of the assessed assessment units, all of which are meeting (100%).

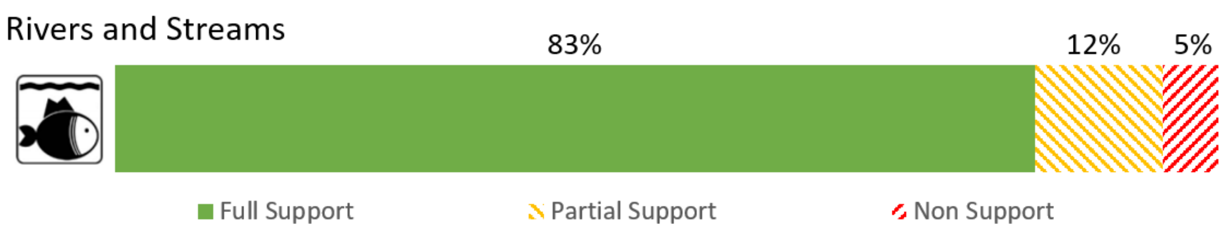

Figure 4. Proportion of rivers/streams assessed as full support, partial support, or nonsupport of those waterbodies assessed for the **CAH** designated use.

Outstanding State Resource Water

On the 2018/2020 305(b) list, 425 assessment units have the OSRW designated use, of which 389 have been assessed. Most of the waterbodies assessed for this use are rivers and streams (386 of the 389), with 315 assessment units found to fully support the OSRW use and 74 assessment units found to be impaired (Figure 5).

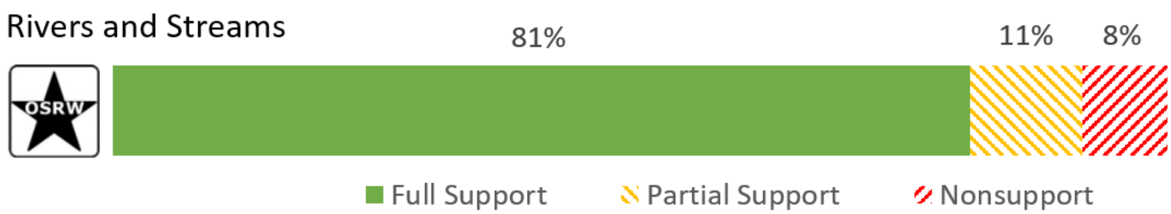

Figure 5. Proportion of rivers/streams assessed as full support, partial support, or nonsupport of those waterbodies assessed for the **outstanding state resource water (OSRW)** designated use.

Primary Contact Recreation

On the 2018/2020 305(b) list, 1,142 assessment units have been assessed for the PCR designated use. Of those assessed, 276 were found to fully support the designated use, while 866 were found to be impaired. River and stream assessment units represent 1,126 of the assessment units, of which 270 are meeting and 856 are impaired for the PCR use (Figure 6). Spring assessment units represent 11 of the assessment units, of which one is meeting and 10 are impaired for the PCR use. Lake and reservoir assessment units represent five of the assessment units, all of which are meeting the PCR use.

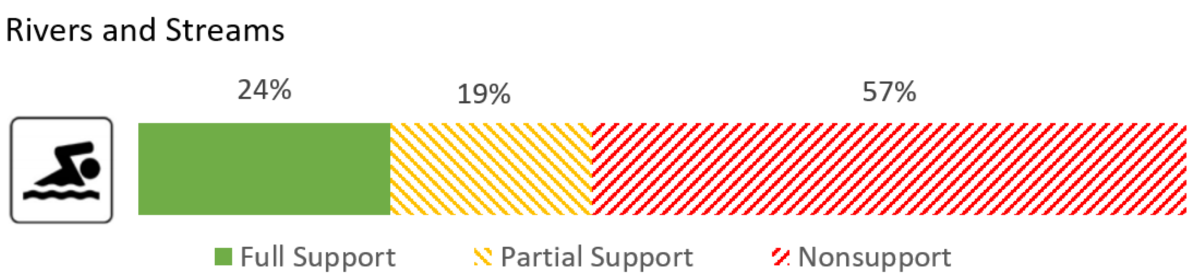

Figure 6. Proportion of rivers/streams assessed as full support, partial support, or nonsupport of those waterbodies assessed for the **PCR** designated use.

Secondary Contact Recreation

On the 2018/2020 305(b) list, 368 assessment units have been assessed for the SCR designated use. Of those assessed, 242 were found to fully support the designated use, while 126 were found to be impaired. River and stream assessment units represent 294 of the assessment units, of which 172 are meeting and 122 are impaired for the SCR use. Lake and reservoir assessment units represent 73 of the assessment units, of which 69 are meeting and four are impaired for the SCR use (Figure 7).

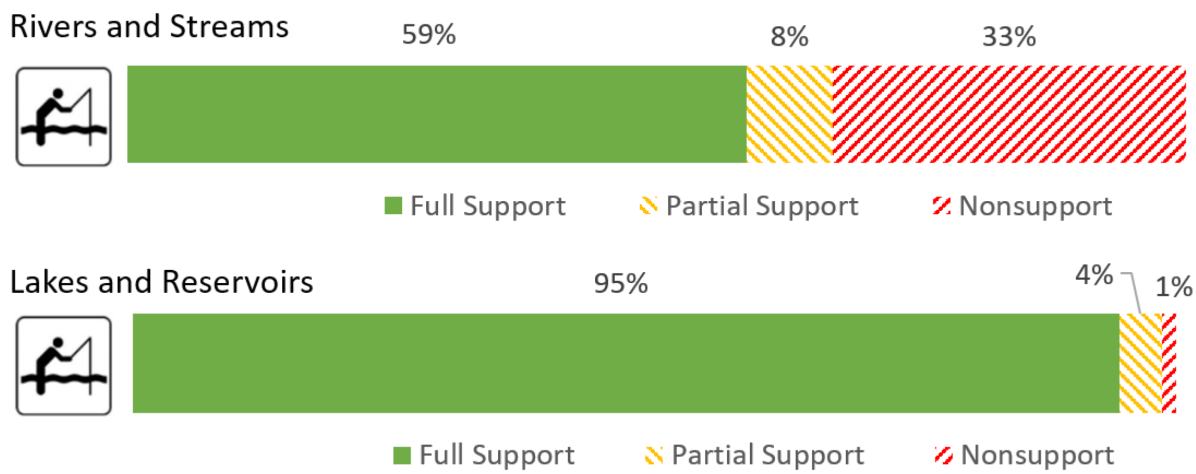

Figure 7. Proportion of rivers/streams and lakes/reservoirs assessed as full support, partial support, or nonsupport of those waterbodies assessed for the **SCR** designated use.

Fish Consumption

On the 2018/2020 305(b) list, 215 assessment units have been assessed for fish consumption. Of those assessed, 100 were found to fully support the designated use, while 115 were found to be impaired. River and stream assessment units represent 173 of the assessment units, of which 78 are meeting and 95 are impaired for fish consumption. Lake and reservoir assessment units represent 42 of the assessment units, of which 22 are meeting and 20 are impaired for fish consumption (Figure 8).

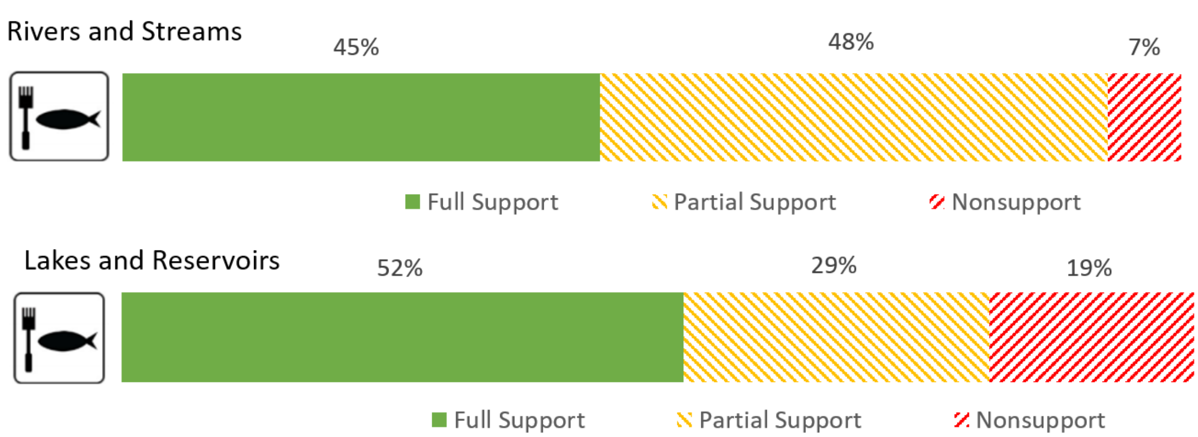

Figure 8. Proportion of rivers/streams and lakes/reservoirs assessed as full support, partial support, or nonsupport of those waterbodies assessed for **fish consumption**.

Impaired Waters

Impaired waters are a subset of the 305(b) list and are those waterbodies where at least one designated use is not being supported, and the cause of impairment is either a pollution (category 4c), a pollutant but a TMDL has not been developed (category 5), or a pollutant and a TMDL has been developed (category 4a).

Of the 2,879 assessment units on the 305(b) list, 1,902 assessment units are impaired for at least one designated use. Broken down by waterbody type, 1,836 rivers/streams are impaired totaling 8,945.2 river miles, 56 lakes/reservoirs are impaired totaling 89,449 acres, and 10 springs are impaired totaling 83,698 springshed acres.

The impaired waters tab of the 305(b) workbook has specific information about all assessment units identified as impaired for one or more designated uses. Parameter level information for those identified as a cause of impairment is available per assessment unit, including if that parameter has a TMDL, the parameter's category, TMDL priority rank (if applicable), cycle first listed (if applicable), and suspected sources.

Causes of Impairment

There are 4,128 parameter-waterbody combinations on the impaired waters list. Those parameters fall into three reporting categories:

1. 2,809 are in category 5, meaning the parameter is a pollutant, identified as a cause of impairment, and requires a TMDL
    a. This is the 303(d) list
2. 710 are in category 4a, meaning the parameter is a pollutant, identified as a cause of impairment, and has an EPA-approved TMDL
3. 609 are in category 4c, meaning the parameter is a pollution, identified as a cause of impairment, but does not require a TMDL

Parameters can be grouped to explore types of impairments throughout the Commonwealth. Figure 9 shows the parameters identified as a cause of impairment on the 2018/2020 305(b) list grouped into the following themes:

1. Pathogens
2. Sedimentation/Turbidity
3. Nutrients/Organic Enrichment (OE)/Dissolved Oxygen
4. Biological Integrity/Habitat/Flow
    a. All parameters in this group are pollutions
5. Salinity/Total Dissolved Solids (TDS)/Chlorides/Sulfates
6. Metals and Mercury
7. Other (including Cause Unknown)
8. Dioxins/PCBs
9. pH/Acidity

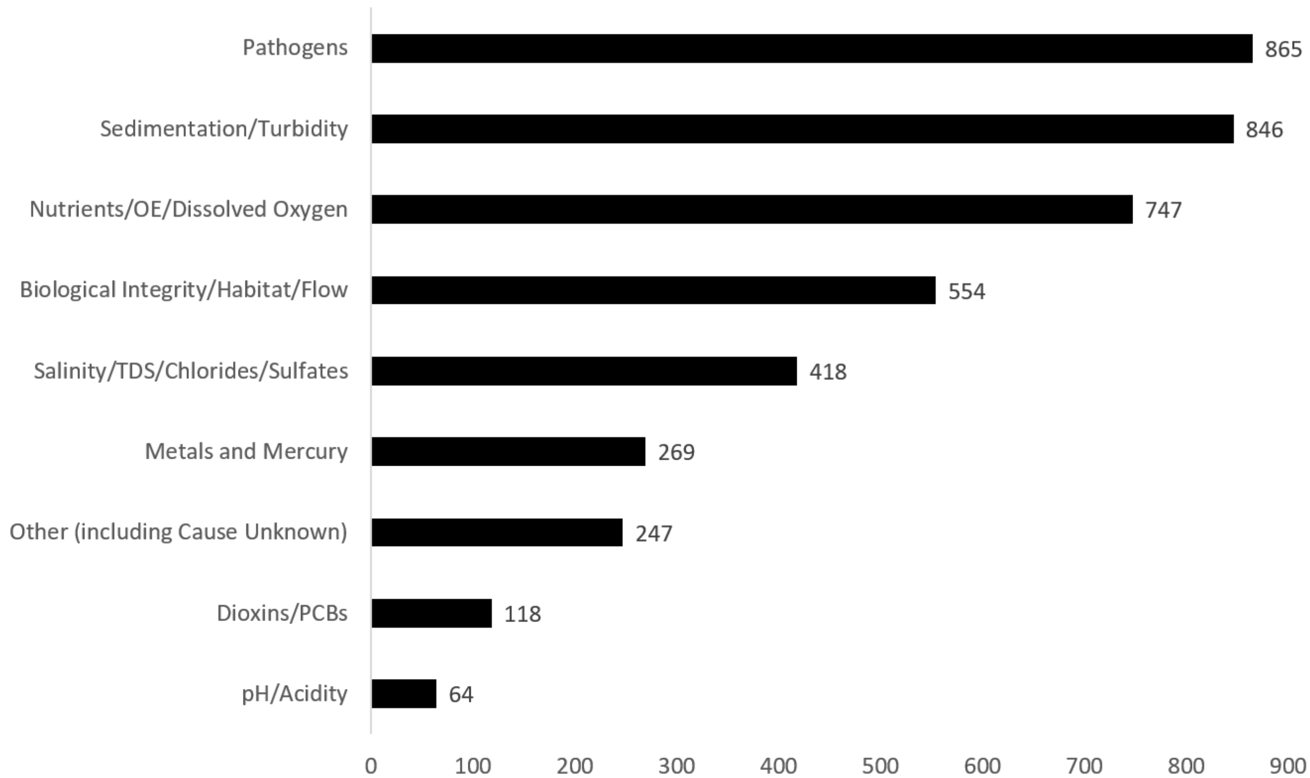

Figure 9. Types of impairments on the 2018/2020 305(b) list where parameters have been grouped into nine (9) themes to better understand the number and types of impairments throughout the Commonwealth.

The 303(d) List

The 303(d) list includes all waterbodies identified as being impaired (not meeting water quality standards) by one or more pollutants where a TMDL has not yet been developed but is required. The 2018/2020 303(d) has 2,809 pollutant-waterbody combinations in need of a TMDL. Each pollutant-waterbody combination is in category 5, has a cycle first listed, suspected sources, and a TMDL priority rank (high, medium, or low) (Table 2).

Broken down by waterbody type, 1,447 rivers/streams are on the 303(d) list totaling 7,166.1 river miles, 55 lakes/reservoirs are on the 303(d) list totaling 89,243 acres, and eight springs are on the 303(d) list totaling 80,490 springshed acres.

Although the 303(d) list is sometimes referred to as the "impaired waters list," it is specifically a subset of the impaired waters where the parameter identified as a cause of impairment is a pollutant and a TMDL has not yet been developed. Figure 10 shows the number of impairments per parameter that are in need of a TMDL, with the priority per parameter distinguished by low (light gray), medium (dark gray), and high (black).

The 303(d) tab of the 305(b) workbook has the official information about all pollutant-waterbody combinations that are on the 303(d) list.

Table 2. Definitions of TMDL priority ranks.

High	A TMDL is in development or will be in development within the next two years, and is expected to be completed during the next one to two reporting cycles (within 1-4 years). Waters ranked as "High" priority focus in part on those identified in the Division's 303(d) Long Term Vision Priorities, which established a plan for developing TMDLs and alternative restoration plans for specific waters and pollutants by 2022. Click here For more information on the 303(d) Long Term Vision Priorities.
Medium	TMDL strategies are in the planning stage for the waterbody and/or pollutant. Methodologies may be under development or data collection may be planned or ongoing. Opportunities for alternative restoration plans may be under review.
Low	A TMDL is not currently in development. This rank include TMDLs for which methodologies may be in development for the pollutant or waterbody type. Some waters ranked as "Low" priority for TMDL development have an EPA-accepted alternative restoration plan that is being implemented, or have an alternative restoration plan in development that is expected to be EPA-accepted within the next two reporting cycles. The progress of each alternative restoration plan is reviewed each cycle to ensure the plan is on track to restoring water quality. The TMDL development priority rank may be updated based on this review. See table columns in the 303(d) list related to "Restoration Plans" for information on these alternative restoration plans.

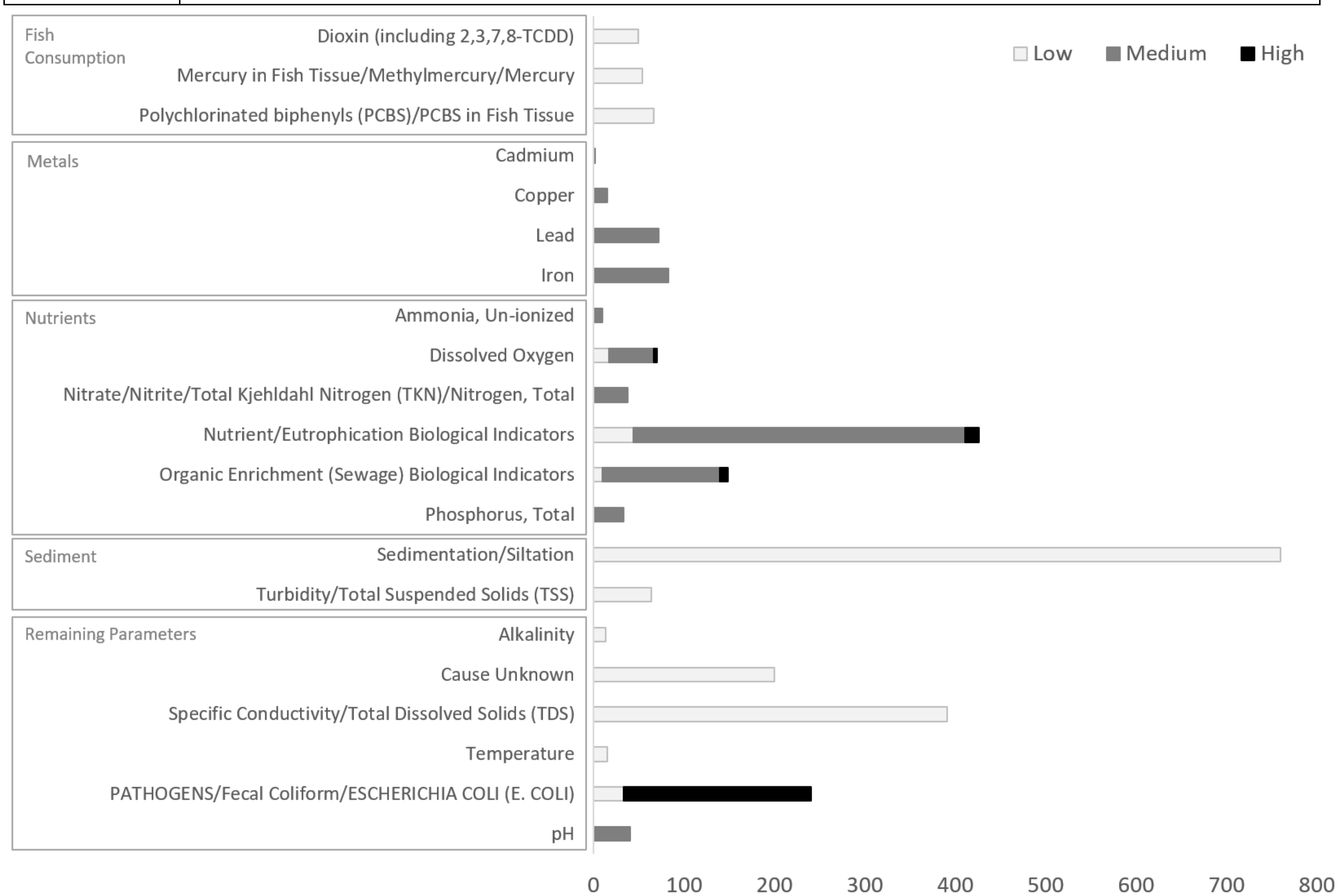

Figure 10. Number of impairments per parameter where the parameter is on the 303(d) list because a TMDL is required but has not yet been developed. TMDL priority rank distinguished by low (light gray), medium (dark gray), and high (black).

Waters with TMDLs

On the 2018/2020 305(b) list there are 742 pollutant-waterbody combinations with an EPA-approved TMDL. The 'waters with a TMDL' tab of the 305(b) workbook has the official information about all pollutant-waterbody combinations with an EPA-approved TMDL.

Since EPA approved the 2016 303(d) list on June 19, 2018, EPA has approved the following TMDLs, representing 263 pollutant-waterbody combinations:

1. Statewide TMDL for Bacteria Impaired Waters, Core Document and Green River and Tradewater River Basins (Action ID KYACT_1), approved by EPA on 2/22/2019
2. Statewide TMDL for Bacteria Impaired Waters, Big Sandy, Little Sandy, and Tygarts (Action ID KYACT_4), approved by EPA on 8/31/2021
3. Statewide TMDL for Bacteria, Kentucky River Basin (Action ID KYACT_5), approved by EPA on 8/31/21
4. Statewide TMDL for Bacteria, Salt and Licking River Basins (Action ID KYACT_6), approved by EPA on 9/23/21

The Approved TMDL Reports webpage has all EPA-approved TMDLs, with a link to each report.

Total Maximum Daily Load Program

Kentucky DOW is implementing the national CWA 303(d) Program Vision, which calls for states to prioritize impaired waters for TMDL development and to develop alternative restoration approaches where appropriate over a six-year period (2016-2022).

In 2011, the CWA 303(d) Program Vision was developed by the EPA and state TMDL program managers as means to improve the effectiveness of the TMDL program. The framework outlined in this program "vision" allows Kentucky to develop state specific priorities, encourages stakeholder engagement, and allows the TMDL section to integrate our work with other CWA program priorities. The vision fosters flexible watershed management but requires the support of many stakeholders – including public, federal, and state agencies – to attain this common goal.

In 2016, Kentucky DOW submitted its first draft of vision priorities to the EPA. The vision priorities list was updated in 2018 using the 2016 303(d) list. This vision priorities list consists of pollutant-waterbody combinations that are prioritized to have a TMDL or alternative restoration plan completed by 2022.

Kentucky DOW's top vision priority for TMDL development is to address all remaining bacteria impairments in the Commonwealth. Another vision priority includes working with stakeholders to develop alternative restoration approaches in communities with the on-the-ground resources to address water quality impairments more quickly than a TMDL approach. Kentucky's first EPA-accepted alternative restoration plan was possible with the cooperation of various stakeholders in the Gunpowder Creek Watershed.

As of this 2018/2020 Integrated Report, Kentucky has completed plans addressing 308 pollutant-waterbody combinations that are part of the vision priorities covering a watershed area of 1,333 square miles. This represents progress towards completion of 72% by pollutant-waterbody combinations

(Figure 11) and 61% by watershed area for completing DOW's commitments for plans in place by the end of 2022. Remaining plans are in development and currently on track for completion before the 2022 Integrated Report. Note that a small percentage of plans (2% of the total pollutant-waterbody combinations that were identified as priorities) will not receive a plan in this effort for a variety of reasons, including some where new data showed that water quality is now meeting standards and the waterbody is slated for delisting.

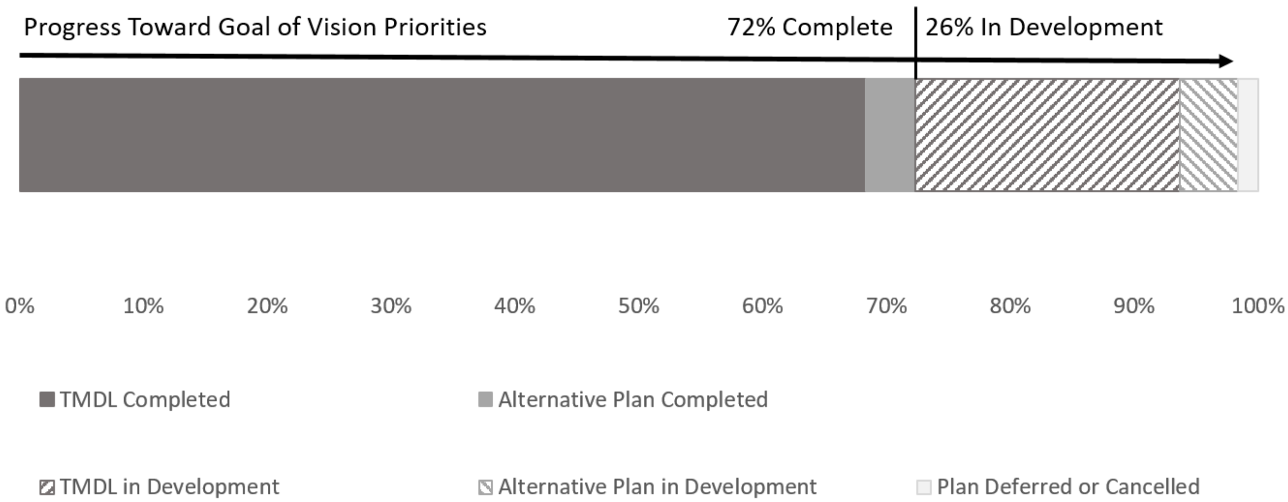

Figure 11. Progress toward completing vision priorities as of this 2018/2020 reporting cycle; the goal is to have all plans in development completed by the end of 2022, fulfilling DOW's vision priority commitments.

If you have questions about the TMDL program, the vision, or alternative restoration approaches, email TMDL@ky.gov.

Introduction

The 2018/2020 Combined Cycle Integrated Report (IR) was prepared by the Kentucky Division of Water (DOW), Department for Environmental Protection (DEP), for submittal to the U.S. Environmental Protection Agency (EPA) to fulfill requirements of sections 303(d), 305(b), and 314 of the Federal Water Pollution Control Act (or Clean Water Act (CWA)) of 1972, as subsequently amended. Section 305(b) of the Act requires states to assess and report current water quality conditions to EPA every two years.

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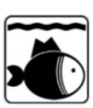


Cold Water Aquatic Habitat (CAH)

As defined in 401 KAR 10:001, CAH means surface waters and associated substrate that are able to support indigenous aquatic life or self-sustaining or reproducing trout populations on a year-round basis. All waterbodies designated as CAH are listed in 401 KAR 10:026, Table C entitled 'Waters

[2] Fish consumption is not a designated use, but is assessed as such and therefore included in this list.

with Added Designated Uses.' There are implementing criteria specific to CAHs; however, where there are no specific criteria to CAH, those criteria promulgated for WAH apply.

Warm Water Aquatic Habitat (WAH)

WAH applies to the majority of waterbodies in the Commonwealth, and are those not designated as CAH (with the exception of lakes or reservoirs that are designated as both CAH and WAH). As defined in 401 KAR 10:001, WAH means a surface water and associated substrate capable of supporting indigenous warm water aquatic life.

Outstanding State Resource Water (OSRW)

This designated use provides additional measures for maintenance of habitat quality, including water quality, for the protection of federally threatened or endangered species that inhabit the OSRW. Additionally, select waterbodies that have water quality and habitat that support a diverse fish or macroinvertebrate community and rate excellent on either the fish (Compton et al. 2003) or macroinvertebrate (Pond et al. 2003) biological community multimetric index may be proposed for designation as an OSRW. Other attributes that qualify a waterbody for OSRW designation can be found in 401 KAR 10:031, Surface Water Standards, Section 8.

All waterbodies designated as OSRW are listed in 401 KAR 10:026, Table C entitled 'Waters with Added Designated Uses.' There are implementing criteria specific to OSRWs; however, where there are no specific criteria to OSRW, those criteria promulgated for WAH apply. Both designated and candidate OSRW are published on the DOW's special waters webpage, so this is often the most up-to-date source of OSRW listings that include candidate waterbodies or segments.

Primary Contact Recreation (PCR) – "Swimming"

PCR is the designated use for waterbodies in the Commonwealth with the implementing criteria to manage water quality for the protection of human health against pathogenic-induced gastrointestinal illnesses during the recreation season of May 1 through October 31. The bacterium *Escherichia coli* (*E. coli*) is a commonly used indicator organism to monitor water quality for safe swimming conditions, where full-body immersion is likely. *E. coli* are bacteria found in the guts of warm-blooded organisms, including humans. The presence of *E. coli* indicate there is likely waste from warm-blooded organisms present in the waterbody and with it the expectation of various pathogenic viruses, parasites and pathogenic strains of bacteria, including *E. coli*. A criterion for pH applies to this designated use during the recreation season. This criterion provides protection to the bather from extremes of both acidic and basic conditions.

Secondary Contact Recreation (SCR) – "Boating and Wading"

SCR is the designated use for waterbodies in the Commonwealth with the implementing criteria to manage water quality for the protection of human health against pathogenic gastrointestinal illnesses and maintain a safe range for pH. These criteria apply to this designated use year-round. Fecal coliforms are bacteria found in the guts of warm-blooded organisms and are the indicator used to monitor the water quality for safe boating and wading, or any form of recreation that does not include full-body immersion. The pH criterion protects against extremes of water quality with regard to acidic and basic conditions. Additional criteria exist to protect the designated use from such conditions including nuisance algal blooms, nuisance aquatic macrophytes, or other pollutions that may deter from the aesthetic qualities of a waterbody.

Domestic Water Supply (DWS)

As defined in 401 KAR 10:001, DWS means surface waters that, with conventional domestic water supply treatment, are suitable for human consumption through a public water system as defined by 40 CFR 141.2, culinary purposes, or for use in a food or beverage processing industry; and meet state and federal regulations promulgated pursuant to the Safe Drinking Water Act, as amended, 42 U.S.C. 300f - 300j-26.

The DWS designated use applies to all waters in the Commonwealth; however, the enabling criteria that implement this designated use are only applied at the point of withdrawal by a public treatment facility. Public water systems are defined as those systems that have at least 15 service connections or regularly serve an average of 25 or more individuals (40 CFR 141.2). The human health criteria that apply are found in 401 KAR 10:031 (Section 6, Table 1, column entitled 'DWS').

Fish Consumption

Fish consumption is not a designated use per state regulation. However, there exist human health criteria in water quality standards for the protection of the population should they choose to catch local fish for consumption. Applicable criteria can be found in 401 KAR 10:031, Surface Water Standards, Sections 2 and 6. As such, the U.S. EPA agrees and requires the assessment results of fish tissue residue monitoring be reported in Section 305(b) of the CWA under the fish consumption designated use.

Monitoring

The Kentucky DOW uses information collected by biologists and scientists to perform assessments on waterbodies to determine if that waterbody is meeting water quality standards and therefore supporting its designated use(s). The DOW operates its primary monitoring programs with a Watershed Management Framework Initiative implemented in 1998, where Basin Management Units (BMU) are sampled on a five-year rotation. Beginning in 1998, waterbodies have been sampled in the following order: 1) Kentucky River, 2) Salt and Licking Rivers, 3) Upper Cumberland and Four Rivers (Lower Cumberland, Ohio River, Mississippi River and Tennessee River), 4) Green River and Tradewater River, and 5) Big Sandy River, Little Sandy River and Tygart's Creek. Ohio River minor tributary basins adjacent to the major river basins are sampled in the same year as the rest of the BMU.

This IR represents monitoring efforts from the Salt and Licking Rivers BMU, sampled in 2014, Upper Cumberland and Four Rivers BMU, sampled in 2015, and Green and Tradewater Rivers BMU, sampled in 2016. This report also incorporates assessment data and results from monitoring that occurred during this reporting cycle (2014 – 2016) outside of the BMUs of focus by programs such as total maximum daily load (TMDL), NPS, and fish tissue. For some programs, if more recent data were available, they were used in addition to the reporting cycle monitoring years.

View this monitoring program dashboard or read below for a description of each DOW monitoring program.

Ambient Streams

Following enactment of the CWA and subsequent state legislation (e.g. KRS 224.10), the Division established a network of 44 stream stations for long-term monitoring in 1979. These stations were sampled bimonthly (six visits per year), with the goals of determining and tracking water quality conditions in larger streams throughout the Commonwealth over time. In 1998, the network was expanded to 72 primary ambient water quality stations and the sampling strategy shifted to a rotating five-year Basin Management Unit (BMU) approach, where extra effort is focused on one BMU during each project year. While all primary ambient monitoring stations are sampled every year, they are sampled monthly in BMU study years and bi-monthly in non-BMU study years. These stations are located at mid- and lower watershed reaches of 8-digit HUC basins, and also occur near the inflow and outflow of major reservoirs.

In addition to the 72 stations of the primary network, the Division established a rotating watershed network in each BMU in 1998. The 104 rotating stations are situated within smaller sub-watersheds of each BMU. They are monitored for the same suite of water quality parameters as primary stations. The objectives of these stations include:

1. Obtain an overall representation of the quality of each basin's water resources
2. Determine water quality conditions associated with major land cover or land uses such as forest, urban, agriculture, and mining
3. Characterize each basin's least-impacted waters
4. Collect data to assist with establishing TMDLs as required by Section 303(d) of the CWA
5. Define water quality conditions in a watershed to answer special issues that may arise requiring long-term water quality monitoring.

Ambient Lakes

The U.S. EPA began sampling the major reservoirs in Kentucky in 1973 as a part of the National Eutrophication Survey (EPA 1972). Following enactment of the CWA, the Kentucky DOW established a network of lake and reservoir stations from 1981 to 1983. This network of lakes and reservoirs were initially selected to satisfy a U.S. EPA Cooperative Agreement Award in 1980. This award was the initial step toward the goal of Section 314(a) that each state shall prepare or establish:

1. An identification and classification according to trophic conditions of all publicly owned freshwater lakes in the state,

2. Procedures, processes, and methods (including land use requirements) to control sources of pollution to lakes, and

3. Methods and procedures, in conjunction with appropriate Federal agencies, to restore the quality of impaired lakes. By 1984, there were 73 lakes or reservoirs in the state program.

For this IR, Kentucky lakes were sampled based on a Watershed Management Framework Initiative approach. A total of 108 lakes that are listed in the Division's lakes inventory were sampled every five years by BMU. This data is primarily used for determining designated use support as defined by Kentucky's water quality standards regulations. Designated use support assessments are typically made for aquatic life and SCR.

Probabilistic Survey of Wadeable Streams

The Probabilistic Stream Bio-assessment Program, first implemented in 1998, collects data from randomly selected stations across the state for use-support designations and to assess the health of Kentucky's stream resources. Stations are randomly selected for sampling using a statistically-sound probability-based sampling design. The results from the random sample can then be applied to the entire region with a known level of uncertainty. This allows resources to be used efficiently to obtain valuable station-specific as well as entire study area condition information.

For this IR, monitoring was conducted using a five-year rotating BMU approach with 50 stations selected within the Salt and Licking Rivers BMU in 2014, and within the Upper Cumberland and Four Rivers BMU in 2015. In 2016, the probabilistic program did not sample while the program was transitioning from a BMU rotation approach to a statewide approach. During the 2024 cycle, we will be able discuss the initial results of the statewide probabilistic program for wadeable streams, which began sampling in 2017.

Reference Reach

The Reference Reach Program began in 1991, and the initial program goal was to determine a network of least-impacted streams within defined regions of the state. Reference Reaches are not necessarily pristine streams, but represent streams least impacted by human activities in each region. As such, they can be considered to represent best available conditions and can be used as benchmarks for comparing water quality parameters with other streams in the same region. Data gathered from the Reference Reach program were used primarily in the past to develop biological indices used for 305(b) assessments of aquatic life use support.

Currently, priorities for Reference Reach Monitoring center on characterizing the natural variability within the reference condition in each region, identifying new reference reach locations, and monitoring the condition of existing reference reaches as identified in 401 KAR 10:030. A firm understanding of the inherent biological variability and natural potential of the streams in a region is needed to address levels of impact to any given stream. This is accomplished using a regional reference approach, which is based on the range of natural conditions found in a population of stations or streams with similar physical characteristics and minimal human impact. The reference condition collectively refers to the range of quantifiable and naturally occurring ecological elements (i.e., chemistry, habitat and biology) present in an area.

In many regions of Kentucky, finding reference quality streams can be a difficult task because of the prevalence of human disturbance across the landscape. First, staff members identify least-impacted waters representative of geographic regions of the state known as ecoregions. Typical reference reach watersheds contain a high proportion of natural vegetation and have minimal human disturbance such as point-source discharges, agricultural land, mining and urban development. Then, data on chemical water quality, sediment quality, habitat condition and biotic communities are collected to define the quality of the streams of a particular ecoregion, and allow other streams in the same ecoregion to be compared to the reference condition.

Intensive Surveys

The Intensive Survey Monitoring Program incorporates data collection activities that support the Success Monitoring Program, the development of TMDLs and alternative restoration plans for 303(d)-listed impairments, the development of watershed plans, and monitoring for other special projects. The data collected by the Intensive Survey Program may be used by other programs within the Division for activities such as water quality standards development or water quality assessments for section 305(b).

Success Monitoring

The initial program of success monitoring in Kentucky began in the early 2000s, but did not develop into a defined program for several years. The DOW's NPS program re-introduced success monitoring in 2013 with the onset of the National Water Quality Initiative (NWQI) Program through the Natural Resources Conservation Service (NRCS). The Success Monitoring Program was then refined with an intent to track effectiveness of Best Management Practices (BMPs) implemented through the watershed planning process. Planning success monitoring for individual streams and watersheds was derived partly from EPA's water quality measures, and through DOW's mission statement.

Success at improving water quality can be demonstrated in a number of ways, but the monitoring focuses primarily on showing change in a designated use attainment. Ideally, data gathered from this program will influence decisions on types of BMPs that are most effective, remove streams from the 303(d) list, and allow the Division to demonstrate successful on-the-ground work to state and federal agencies.

Success Monitoring projects whose data were used for this IR include:

- Hinkston Creek watershed, collected in 2014 and 2015
- Little Pitman Creek watershed, collected in 2016
- Martis Branch watershed, collected in 2016
- Pleasant Run watershed, collected in 2016
- North Fork Kentucky River Tributaries in Letcher County, collected in 2017 and 2018

Monitoring 303(d)-listed waters for TMDLs and other plans

Once a lake, stream segment, or other waterbody has been assessed as impaired and placed on the 303(d) list, development of a TMDL is required. The first step in the process of addressing the impairment is to gather all existing data collected by the DOW. Data generated outside of state government may be requested from the collecting agency if the data were collected under an approved quality assurance project plan (QAPP). Once existing data have been compiled, it is frequently discovered that additional water quality, biological, bacteriological, and discharge data are necessary to confirm impairments, to identify any additional impairments in the watershed, and to collect sufficient data for development of a TMDL or to support other planning efforts that may be initiated in advance of a TMDL. In these cases, additional monitoring projects are planned and conducted.

The Intensive Survey section uses an intensive approach to monitoring in watersheds selected for the development of TMDLs and other similar plans. Monitoring will typically occur over two or three years. During the first year of sampling, data collection may focus on confirming the nature of the impairments and possible sources of those impairments. During the second year, targeted sampling for identified causes within the impaired segment(s) usually occurs. The second year also can include data collection in smaller, un-assessed tributaries that were not sampled during the first year of monitoring but may be contributing to the identified impairment. A third year of monitoring may be warranted if data gaps still exist.

TMDL development monitoring projects whose data were used for this IR include:

- Claylick Creek watershed, data collected in 2013 and 2014
- Cypress Creek watershed, data collected 2016 - 2018
- Strodes Creek watershed, data collected in 2014 and 2015
- Damon Creek watershed, data collected in 2015
- Chestnut Creek watershed, data collected in 2016

Special Projects

The Intensive Survey section can apply the intensive approach to monitoring in watersheds for other projects, as needed. Each intensive survey project has a detailed study plan that outlines the geographic boundary of the study, the field activities involved, the types and number of samples required, and the analyses and reports to be generated. Schedules for specific activities and goals for the project are included.

Special Intensive Survey projects whose data were used for this IR include:

- Bluegrass Nutrient Study, data collected 2013 – 2015
- Marsh Creek watershed, data collected in 2013 and 2014
- Wild Rivers project, data collected 2013 – 2016

Fish Tissue

The Fish Tissue Contaminant Monitoring Program collects fish samples from across the state to assist in making recommendations to the public on the safe consumption of wild-caught fish within Kentucky. The program also provides monitoring support to meet CWA requirements.

Fish samples are collected once every five years from lakes and reservoirs that are greater than 65 acres and have a publicly accessible boat ramp. In addition, waterbodies with site-specific advisories are revisited on a rotation to determine if the specific advisories are still needed. Streams and rivers are visited as resources are available, generally associated with other Department monitoring programs.

Fish are analyzed for metals (e.g. mercury and selenium), PCBs, chlordane, pesticides and herbicides. The results are provided to the Fish Consumption Advisory Group comprised of the Kentucky Departments for Environmental Protection, Public Health and Fish and Wildlife Resources. The Group reviews the data and makes updates to consumption advisories as needed. Where applicable, and where data requirements are met, tissue data are also used for 305(b) attainment of the fish consumption designated use.

Outside Agency Data

The Kentucky DOW also uses data collected by outside agencies, such as United States Geological Survey (USGS) and United States Army Corps of Engineers (USACE). For this IR cycle, 61 stations with data collected by outside agencies contributed to attainment decisions.

Monitoring Summary

In total, 1,106 stations had data collected where the data were used for assessment for this 2018/2020 IR cycle. Those stations represent streams, rivers, lakes, and springs. Table 3 shows the number of samples collected and analyzed per data type for this cycle.

Table 3. Number of samples collected and analyzed per data type where the data were used for assessment during this 2018/2020 Integrated Reporting cycle.

Water Chemistry Samples	Bacteria Samples	Chlorophyll-a Samples	Macroinvertebrate Samples	Tissue Samples	Fish Samples
4,233	1,713	401	352	153	133

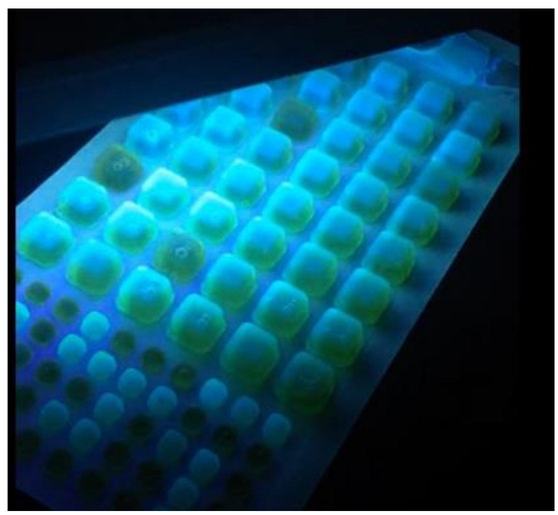
Assessment

Before data are used in the assessment process, they are reviewed to ensure data are of sufficient quantity and quality to make designated use attainment decisions. This review process includes a primary and secondary quality assurance (QA) of the data collected to ensure the following:

- Data were collected in accordance with any applicable QAPP, Program Management Plan (PMP), or Project Study Plan (PSP)
- Applicable Standard Operating Procedures (SOP) were followed
- Appropriate site(s) visited with necessary field forms and documentation (e.g. Chain of Custody)
- Meters calibrated appropriately and calibration trackable to an instrument and site visit
- Data quality objectives (DQOs) were met as supported by QA samples
- Any other project specific details in need of verification

Of the nearly 1,500 stations that were reviewed for assessment purposes, 1,106 stations had data of sufficient quantity and quality and were used to complete 915 assessments. To complete assessments, available data are summarized and analyzed to make final attainment decisions, which are reported in the 305(b), the 303(d), and discussed within this IR. When sampling occurs, specific information is gathered for each designated use.

- To assess PCR - bacteria levels are examined during the recreation season (May – October)
- To assess aquatic life for streams - water chemistry, habitat, and biological communities are examined
- To assess aquatic life for lakes - profile data, chlorophyll-a, and water chemistry data are examined
- To assess fish consumption – fish are collected where their tissue (usually filet) is examined for pollutants of concern, such as mercury and PCBs



For more detailed information about Kentucky's assessment and listing methodology, refer to the Consolidated Assessment and Listing Methodology (CALM): Surface Water Quality Assessment in Kentucky, the Integrated Report (KDOW 2015). In addition to this document, an update to Kentucky's Assessment Methodology for Fish Consumption (KDOW 2020) is considered an addendum to the CALM, and should be used in place of the fish consumption method outlined in section 3.6 on page 55 of the 2015 CALM document.

The reader may also find EPA's factsheets on water quality parameters a helpful resource in understanding how the data collected informs attainment decisions.

Categories and Attainment

The 305(b) list is a list of all waterbodies that have been assessed for one or more designated uses. Waterbodies on the 305(b) list are put into different categories depending upon the assessment decision made for that waterbody (Figure 12). Categories are assigned at the parameter level, which is the level that data are collected and analyzed, the designated use level, which is the level that the water quality standards for a particular parameter apply, and the assessment unit level, which is determined from the assessed designated uses and their categories (Figure 12).

Impaired waters are those waters found to partially support or not support one or more of its designated uses due to either a pollution or a pollutant. The 303(d) list, which is a subset of the 305(b) list, are those waters identified as impaired where the cause of impairment is a pollutant and requires a TMDL. All pollutant-waterbody combinations on the 303(d) list are in category 5 (Figure 12).

In previous cycles, Kentucky had a state-specific category of 5b, which was defined as 'segment does not support designated uses based on evaluated data, but based on Kentucky listing methodology, insufficient data are available to make a listing determination. No TMDL needed.' These waters had no instream data to confirm the attainment, but were suspected as impaired based on discharge monitoring report data. With the creation of Kentucky's Assessment and TMDL Tracking System (KATTS), we now track these waters as category 3 waters with a facility parameter flag, where they are tracked and prioritized for instream monitoring to confirm the suspected impairment.

View this category story map to explore waterbodies within each assessment unit category.

	Category	Assessment Unit Category Definition	Designated Use Category Definition	Parameter Category Definition	
305(b)	1	Assessment unit supports all designated uses, and all applicable designated uses assessed			Meeting
	2	Assessment unit supports designated use(s), but not all designated uses assessed	Designated use is supported	Parameter meets water quality standard	
	2b	Assessment unit currently supports designated use(s), but previously impaired and proposed for delisting	Designated use is supported, but previously impaired and proposed for delisting	Parameter meets water quality standard, but previously identified as a cause of impairment and proposed for delisting	
	2c	Assessment unit supports designated use(s), and has an EPA approved or established TMDL	Designated use is supported, and has an EPA approved or established TMDL	Parameter meets water quality standard, and has an EPA approved or established TMDL	
	3	Designated use(s) has/have not been assessed (insufficient information or no data)	Designated use has not been assessed (insufficient information or no data)	Parameter level attainment has not been assessed (insufficient information or no data)	
	4a	Assessment Unit does not support designated use(s), and has an EPA approved or established TMDL	Designated use is impaired, and has an EPA approved or established TMDL	Parameter does not meet water quality standards, and has an EPA approved or established TMDL	Impaired
	4b	Assessment unit does not support designated use(s), and has an approved alternative pollution control plan stringent enough to meet water quality standard(s) within a specified time	Designated use is impaired, and has an approved alternative pollution control plan stringent enough to meet water quality standard(s) within a specified time	Parameter does not meet water quality standards, and has an approved alternative pollution control plan stringent enough to meet water quality standard(s) within a specified time	
	4c	Assessment unit does not support designated use(s), but is not attributable to a pollutant or a combination of pollutants	Designated use is impaired, but is not attributable to a pollutant or a combination of pollutants	Parameter does not meet water quality standards, and that parameter is a pollution	
303(d)	5	Assessment unit does not support designated use(s), and is attributable to a pollutant or a combination of pollutants; TMDL required	Designated use is impaired, and is attributable to a pollutant or a combination of pollutants; TMDL required	Parameter does not meet water quality standards, and that parameter is a pollutant; TMDL required	

Figure 12. Definition of each category at the assessment unit level, the designated use level, and the parameter level; the figure demonstrates how these categories relate to the 305(b), meeting versus impaired, and the 303(d).

As stated earlier, the assessment unit level category is determined from the assessed designated uses and their categories. For example, if an assessed waterbody has the following attainments and categories:

- PCR is partial support (PS in Figure 13) due to the pollutant *E. coli*, which has a TMDL; the parameter level category is 4a and the designated use category is 4a
- WAH is nonsupport (NS in Figure 13) due to the pollutants iron and sedimentation/siltation and the pollution habitat (streams)
    - The parameter category for habitat (streams) is 4c
    - Iron, which has TMDL, has a parameter category of 4a
    - The parameter category for sedimentation/siltation is 5
    - The designated use category is 5
- SCR is full support, where the parameter fecal coliform was found to meet water quality standards
    - The parameter category and designated use category are 2
- Fish consumption is full support, where the parameter mercury in fish tissue was found to meet water quality standards
    - The parameter category and designated use category are 2
- The DWS designated use is unassessed, making it category 3

The overall assessment unit is in category 5 (Figure 13).

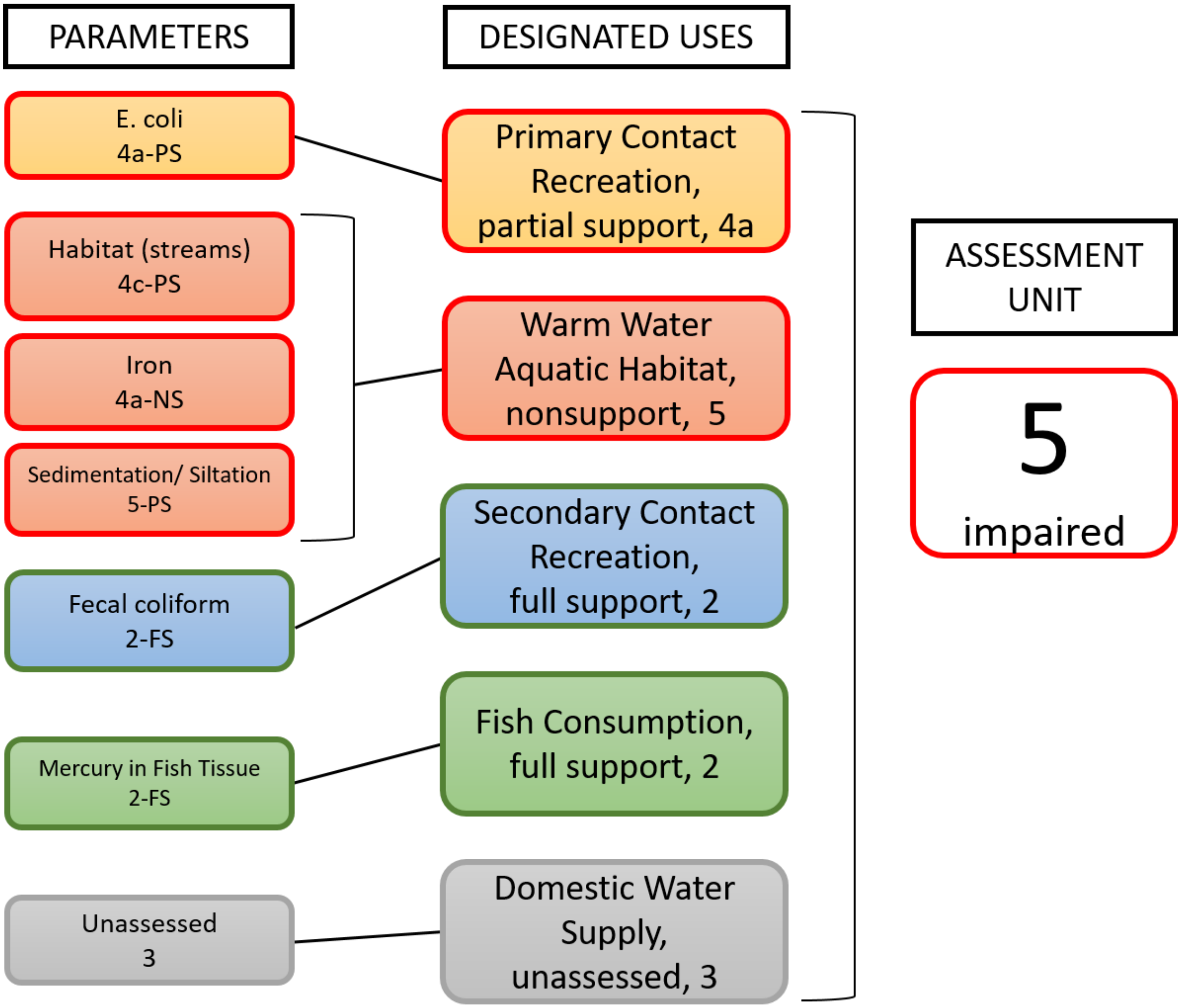


Figure 13. Schematic diagram of how categories at the parameter level determine the designated use category, and how the designated use categories determine the overall assessment unit category.

The 305(b) and the 303(d) Lists

The 305(b) list is a cumulative list; once a waterbody is on this list, it remains. A waterbody may change categories depending upon the use attainment(s), but it is always accounted for on the 305(b) list. This IR focuses on waters that had available data (of sufficient quantity and quality) to make an assessment decision for the 2018/2020 IR. Any historic assessment from the 2016 305(b) list that did not have new data collected was passed forward to the 2018/2020 305(b) list unchanged.

Results

Statewide Scale Results

The following sections discuss the 305(b) list, the 303(d) list, new listings, delistings submitted to EPA, and waters with an EPA-approved TMDL. This same information can be found in the 305(b) workbook. For a more interactive approach to these results, visit the assessment results page of the IR site.

The 305(b) List

The 305(b) list is an inventory of all waterbodies that have been assessed for at least one designated use from this cycle and all prior cycles. The spatial extent of each assessment unit is identified within the list. Kentucky's 2018/2020 305(b) list has 2,879 assessment units, representing 13,061.6 river miles, 203,310 lake/reservoir acres, and 168,055 springshed acres.

Table 4 shows how many assessment units are in each category at the designated use level and at the assessment unit level. Categories 2, 2b, and 2c relate to the assessment unit or designated use being met (full support), category 3 is unassessed, and categories 4a, 4c, and 5 relate to the assessment unit or designated use being impaired (partial support or nonsupport). Category 1 is only applicable at the assessment unit level and means all applicable designated uses have been assessed and all are meeting, of which there are six (Table 4).

Table 4. Number of assessment units (AU) in each category per designated use and per assessment unit for all assessment units on Kentucky's 2018/2020 305(b) list.

Category	WAH	CAH	OSRW	PCR	SCR	FC	DWS	AU
1	0	0	0	0	0	0	0	6
2	1045	75	314	246	228	100	95	955
2b	6	0	1	12	3	0	0	7
2c	6	0	0	18	11	0	0	9
3	325	4	36	1737	2511	2664	2783	0
4a	20	0	1	592	75	1	0	316
4c	94	0	8	0	4	0	0	76
5	1301	13	65	274	47	114	1	1510

The 305(b) list tab of the 305(b) workbook has the official information about all assessment units that are on the 305(b) list, or explore the 305(b) tab of the 305(b) dashboard for a more interactive approach.

The 303(d) List

The 303(d) list is a subset of the 305(b) list and includes all waterbodies identified as being impaired (not meeting water quality standards) by one or more pollutants where a TMDL is required. Each pollutant-waterbody combination is in category 5, has a cycle first listed, suspected sources, and a TMDL priority rank (high, medium, or low) (Table 5).

Table 5. Definitions of TMDL priority ranks.

High	A TMDL is in development or will be in development within the next two years, and is expected to be completed during the next one to two reporting cycles (within 1-4 years). Waters ranked as "High" priority focus in part on those identified in the Division's 303(d) Long Term Vision Priorities, which established a plan for developing TMDLs and alternative restoration plans for specific waters and pollutants by 2022. Click here For more information on the 303(d) Long Term Vision Priorities.
Medium	TMDL strategies are in the planning stage for the waterbody and/or pollutant. Methodologies may be under development or data collection may be planned or ongoing. Opportunities for alternative restoration plans may be under review.
Low	A TMDL is not currently in development. This rank include TMDLs for which methodologies may be in development for the pollutant or waterbody type. Some waters ranked as "Low" priority for TMDL development have an EPA-accepted alternative restoration plan that is being implemented, or have an alternative restoration plan in development that is expected to be EPA-accepted within the next two reporting cycles. The progress of each alternative restoration plan is reviewed each cycle to ensure the plan is on track to restoring water quality. The TMDL development priority rank may be updated based on this review. See table columns in the 303(d) list related to “Restoration Plans” for information on these alternative restoration plans.

On the 2018/2020 303(d), there are 2,809 pollutant-waterbody combinations that require a TMDL. Broken down by waterbody type, 1,447 rivers/streams are on the 303(d) list totaling 7,166.1 river miles, 55 lakes/reservoirs are on the 303(d) list totaling 89,243 acres, and eight springs are on the 303(d) list totaling 80,490 springshed acres.

Although the 303(d) list is sometimes referred to as the “impaired waters list”, it is specifically a subset of the impaired waters where the parameter identified as a cause of impairment is a pollutant and a TMDL has not yet been developed. Figure 14 shows the number of impairments per parameter that are in need of a TMDL, with the priority per parameter distinguished by low (light gray), medium (dark gray), and high (black).

The 303(d) tab of the 305(b) workbook has the official information about all pollutant-waterbody combinations that are on the 303(d) list, or explore the 303(d) tab of the 305(b) dashboard for a more interactive approach.

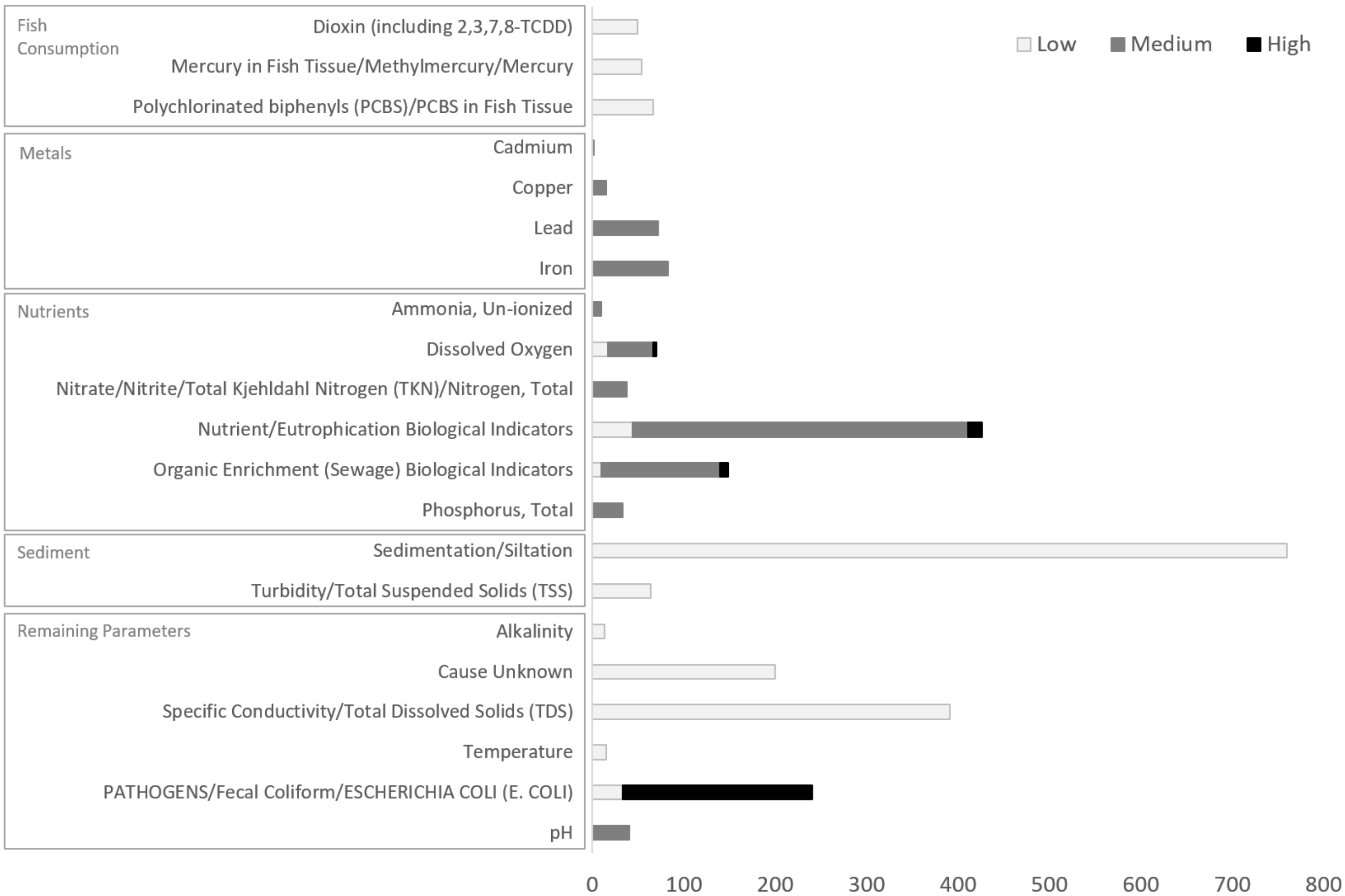


Figure 14. Number of impairments per parameter where the parameter is on the 303(d) list because it is a pollutant and a TMDL is required but has not yet been developed. TMDL priority rank distinguished by low (light gray), medium (dark gray), and high (black).

New Listings

New listings are a subset of the 303(d) and are those pollutants that are newly listed on the 2018/2020 303(d) as causes of impairment (not meeting water quality standards) and require a TMDL. Each pollutant-waterbody combination is in category 5 and has a cycle first listed of 2020 (representing the 2018/2020 IR cycle).

On the 2018/2020 303(d), there are 287 new listings, 31 of which replace the parameter fecal coliform with the parameter pathogens since fecal coliform criteria for PCR were retired in 2019 (Figure 15).

The new listings tab of the 305(b) workbook has the official information about all pollutant-waterbody combinations that are newly listed during this cycle, or explore the new listings tab of the 305(b) dashboard for a more interactive approach.

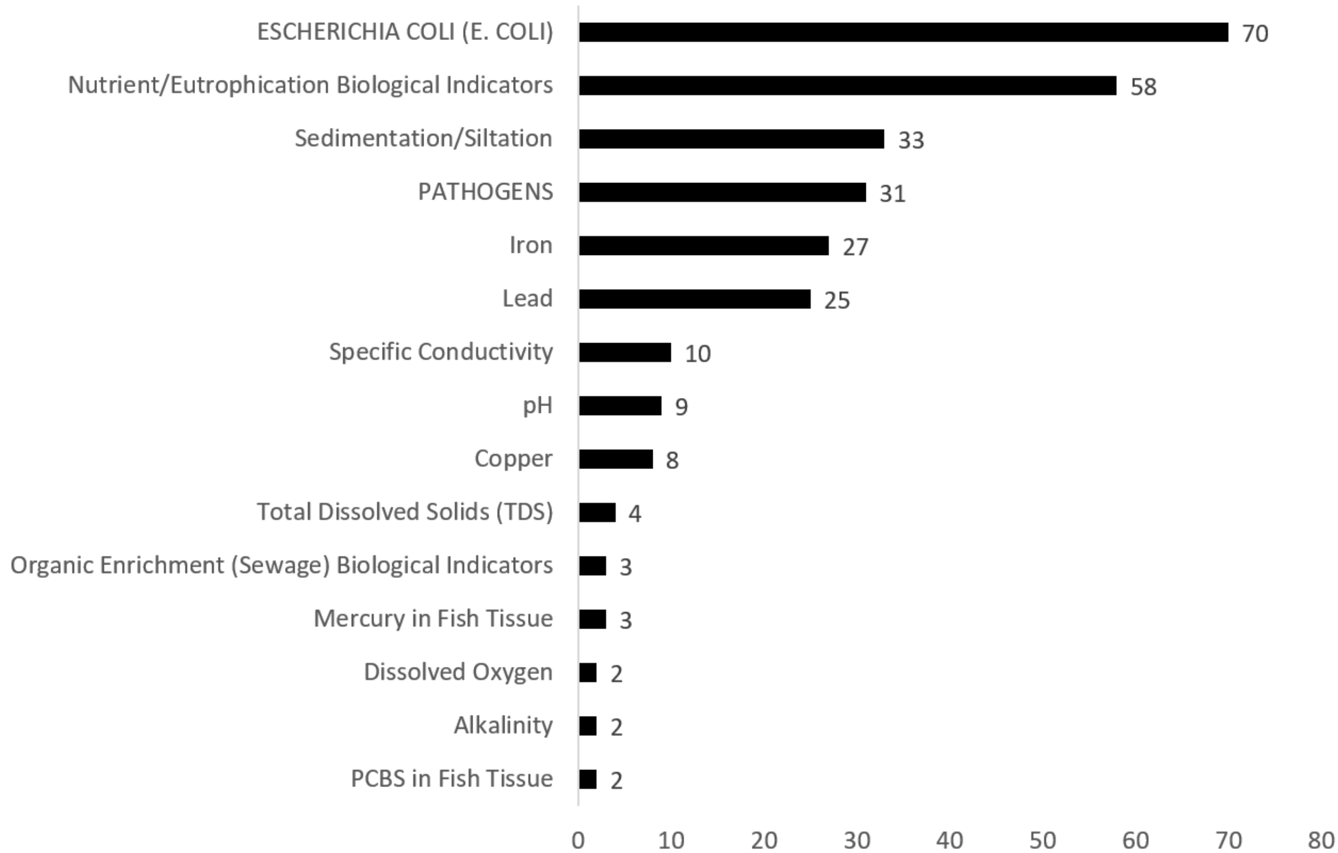


Figure 15. New listings on the 2018/2020 303(d) list per parameter.

Delistings

The delistings are those pollutants that were previously listed as impaired (not meeting water quality standards) and have been proposed for delisting as part of the 2018/2020 reporting cycle.

For this cycle, DOW has requested EPA approval to remove 193 pollutant-waterbody combinations from the 303(d) list (Figure 16). Of these, 74 replace fecal coliform with either E. coli or pathogens since fecal coliform criteria for PCR were retired in 2019. These delistings are associated with the reason 'WQS no longer applicable' (WQS is water quality standards). The remainder of the delistings are either related to clarification of listing cause, correction of a listing error, or attributed to the WQS being attained, of which there are 70 (Table 6).

The delistings tab of the [305(b) workbook]() has the official information about all pollutant-waterbody combinations that are proposed for delisting as part of this cycle, or explore the delistings tab of the [305(b) dashboard]() for a more interactive approach.

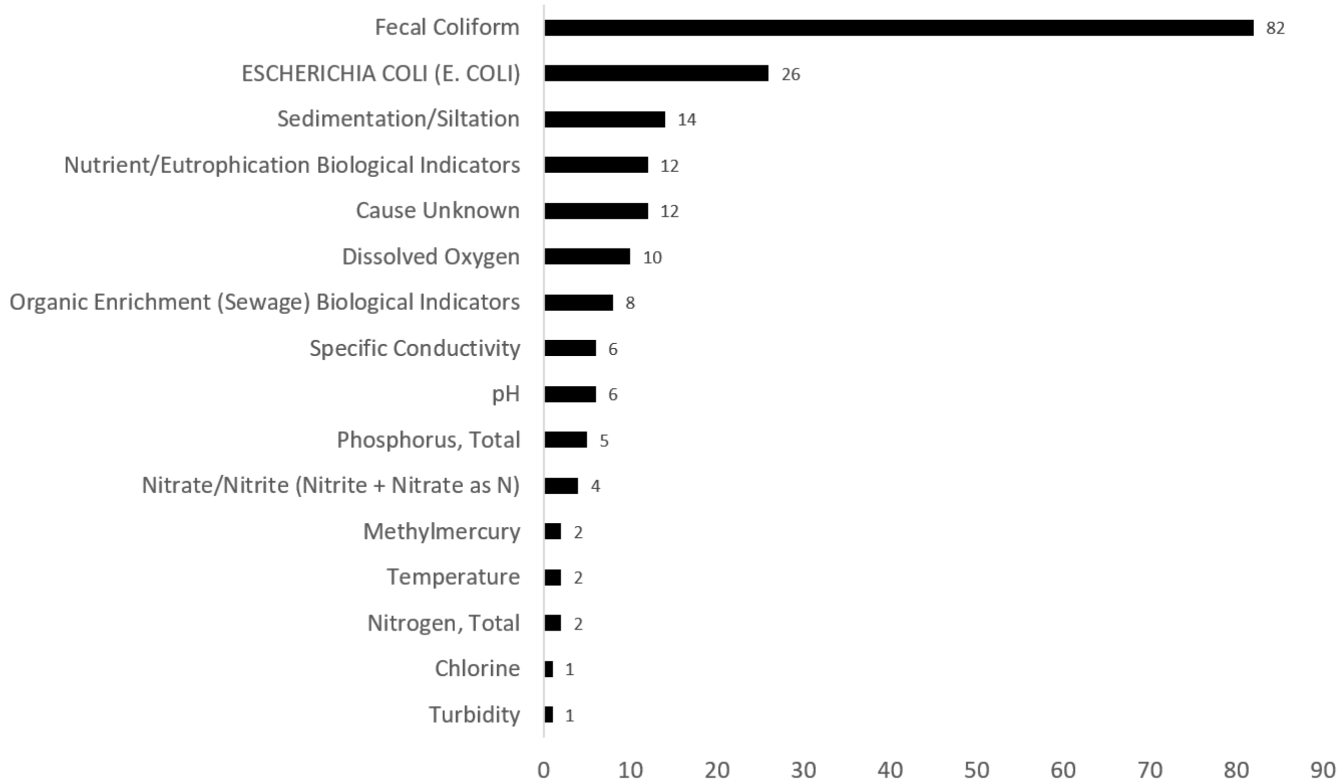


Figure 16. Parameters proposed for delisting as part of the 2018/2020 305(b).

Table 6. Number of delistings per delisting reason for those parameters proposed for delisting as part of the 2018/2020 305(b).

Delisting Reason	Count
WQS no longer applicable	74
Applicable WQS attained; based on new data	64
Data and/or information lacking to determine WQ status; original basis for listing was incorrect	27
Clarification of listing cause	22
Applicable WQS attained; original basis for listing was incorrect	4
Applicable WQS attained; reason for recovery unspecified	1
Applicable WQS attained, due to restoration activities	1

Waters with TMDLs

Waters with a TMDL are those waterbodies with an EPA-approved TMDL for one or more pollutant-waterbody combination(s). The parameter may be in category 4a, where the parameter is identified as a cause of impairment, or category 2c, where the parameter has been found to meet water quality standards since the TMDL was developed.

On the 2018/2020 305(b) list there are 742 pollutant-waterbody combinations with an EPA-approved TMDL (Figure 17). Since EPA approved the 2016 303(d) list on June 19, 2018, EPA has approved the following TMDLs, representing 263 pollutant-waterbody combinations:

1. Statewide TMDL for Bacteria Impaired Waters, Core Document and Green River and Tradewater River Basins (Action ID KYACT_1), approved by EPA on 2/22/2019
2. Statewide TMDL for Bacteria Impaired Waters, Big Sandy, Little Sandy, and Tygarts (Action ID KYACT_4), approved by EPA on 8/31/2021
3. Statewide TMDL for Bacteria, Kentucky River Basin (Action ID KYACT_5), approved by EPA on 8/31/21
4. Statewide TMDL for Bacteria, Salt and Licking River Basins (Action ID KYACT_6), approved by EPA on 9/23/21

The Approved TMDL Reports webpage has all EPA-approved TMDLs, with a link to each report.

The 'waters with a TMDL' tab of the 305(b) workbook has the official information about all pollutant-waterbody combinations with an EPA-approved TMDL; the 'waters with a TMDL tab' of the 305(b) dashboard can be explored for a more interactive approach.

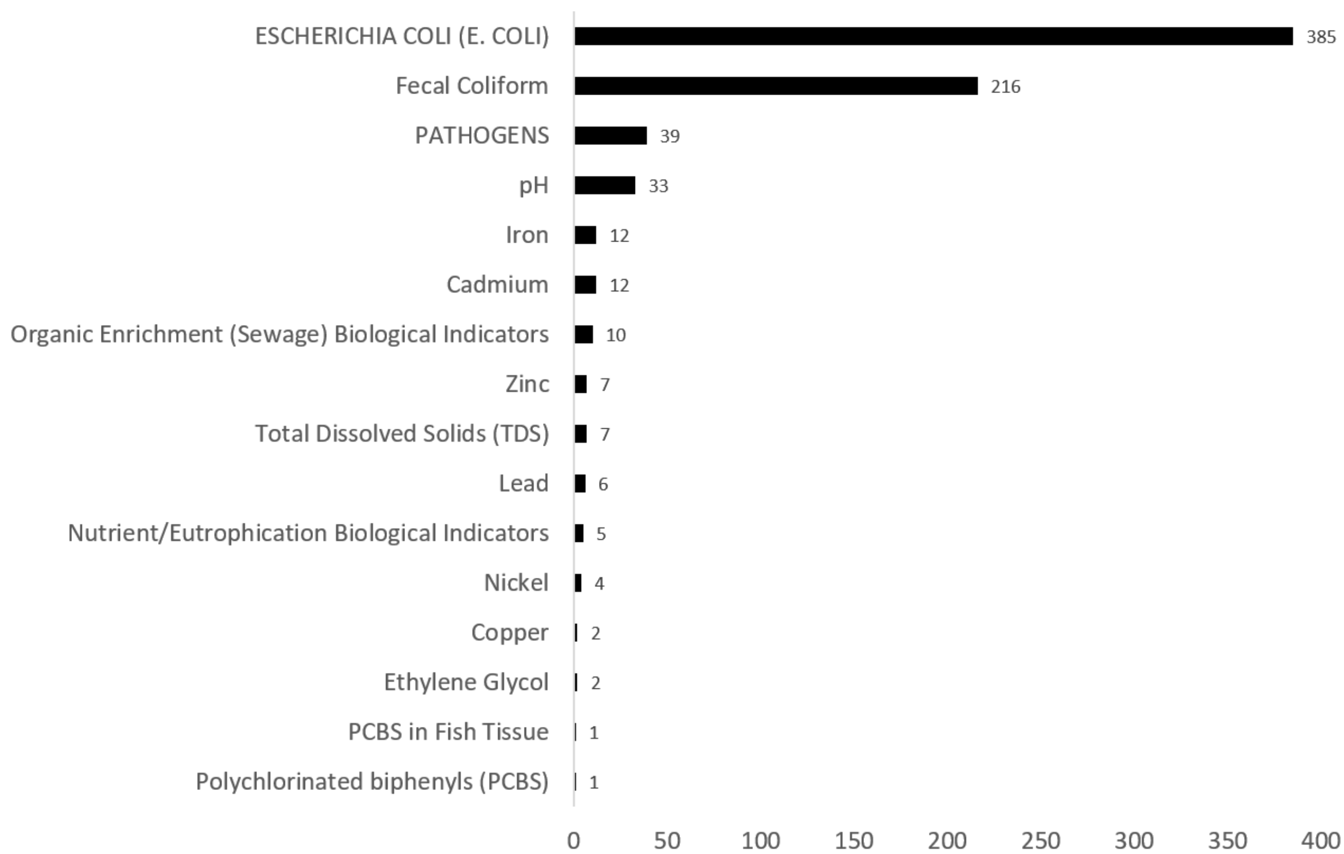


Figure 17. Parameters with an EPA-approved TMDL, where the parameter may be a cause of impairment (category 4a), or have been found to meet water quality standards since the TMDL was developed (category 2c).

Designated Use Level (all waterbody types)

For all 2,879 assessment units on the 2018/2020 305(b) list, regardless of waterbody type, attainment per designated use is outlined in Table 7 and displayed in Figure 18.

Table 7. Attainment per designated use for all 2,879 assessment units on the 2018/2020 305(b) list.

Category	WAH	CAH	OSRW	PCR	SCR	FC	DWS
Full Support	1057	75	315	276	242	100	95
Partial Support	785	9	42	222	27	95	1
Nonsupport	630	4	32	644	99	20	0
Not Assessed	325	4	36	1737	2511	2664	2783
Not Applicable	82	2787	2454	0	0	0	0

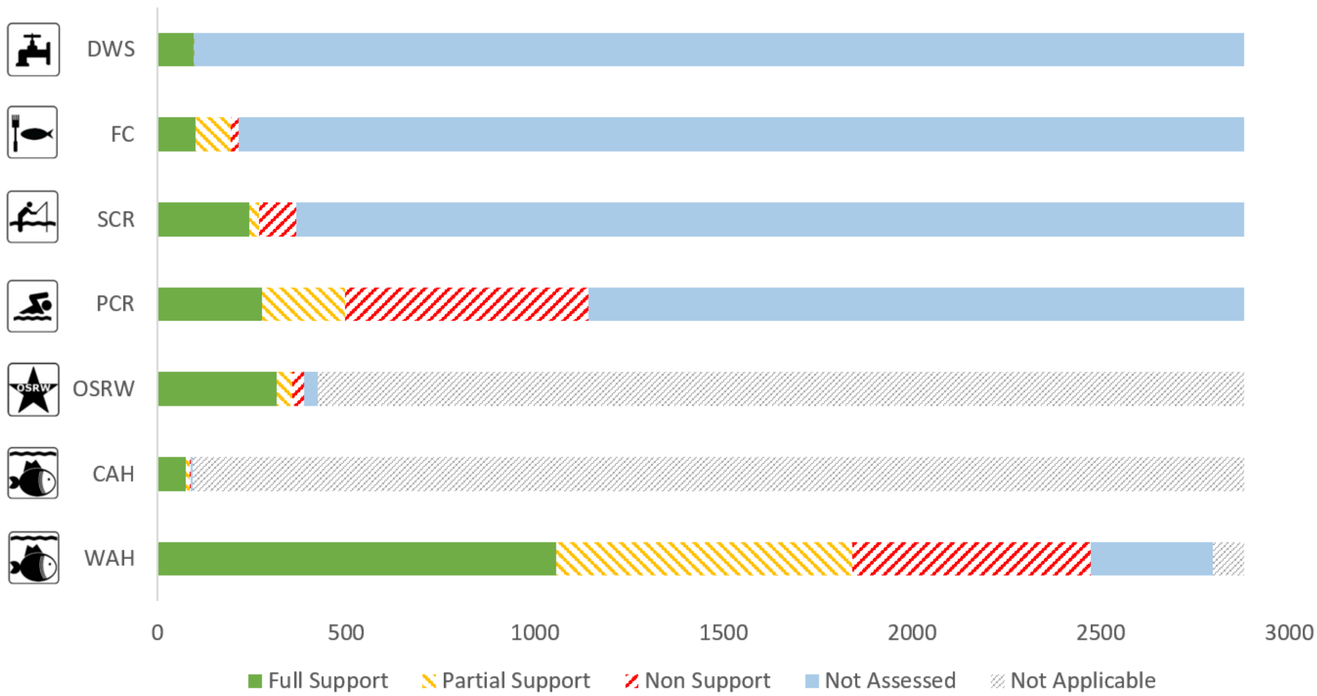


Figure 18. Assessment status and attainment for all 2,879 assessment units on the 2018/2020 305(b) per designated use.

Aquatic Life and OSRW

On the 2018/2020 305(b) list, 2,472 assessment units have been assessed for the WAH designated use, making it the most commonly assessed designated use. Of those assessed, 1,057 fully support the WAH designated use, while 1,415 are impaired. River and stream assessment units represent 2,374 of the assessment units, of which 998 are meeting and 1,376 are impaired. Lake and reservoir assessment units represent 97 of the assessment units, of which 58 are meeting and 39 are impaired.

On the 2018/2020 305(b) list, 92 assessment units have the CAH designated use, 88 of which have been assessed. River and stream assessment units represent 78 of the assessed assessment units, of which 65 are meeting and 13 are impaired. Lake and reservoir assessment units represent 10 of the assessed assessment units, all of which are meeting (100%).

On the 2018/2020 305(b) list, 425 assessment units have the OSRW designated use, of which 389 have been assessed. Most of the waterbodies assessed for this use are rivers and streams (386 of the 389) and are meeting, with 315 assessment units found to fully support OSRW and 74 assessment units found to be impaired.

Visit the aquatic life dashboard to explore these assessment results in a more interactive platform, which has a tab for WAH, CAH, and OSRW.

Fishing and Recreating

On the 2018/2020 305(b) list, 1,142 assessment units have been assessed for the PCR designated use. Of those assessed, 276 were found to fully support the designated use, while 866 were found to be impaired. River and stream assessment units represent 1,126 of the assessment units, of which 270 are meeting and 856 are impaired for the PCR use. Spring assessment units represent 11 of the assessment units, of which one is meeting and 10 are impaired for the PCR use. Lake and reservoir assessment units represent five of the assessment units, all of which are meeting the PCR use.

On the 2018/2020 305(b) list, 368 assessment units have been assessed for the SCR designated use. Of those assessed, 242 were found to fully support the designated use, while 126 were found to be impaired. River and stream assessment units represent 294 of the assessment units, of which 172 are meeting and 122 are impaired for the SCR use. Lake and reservoir assessment units represent 73 of the assessment units, of which 69 are meeting and four are impaired for the SCR use.

On the 2018/2020 305(b) list, 215 assessment units have been assessed for fish consumption. Of those assessed, 100 were found to fully support the designated use, while 115 were found to be impaired. River and stream assessment units represent 173 of the assessment units, of which 78 are meeting and 95 are impaired for fish consumption. Lake and reservoir assessment units represent 42 of the assessment units, of which 22 are meeting and 20 are impaired for fish consumption.

Visit the fishing and recreating dashboard to explore these assessment results in a more interactive platform, which has a tab for PCR, SCR, and fish consumption.

Impaired Waters

Impaired waters are a subset of the 305(b) list and are those waterbodies where at least one designated use is not being supported, and the cause of impairment does not require a TMDL (category 4c), requires a TMDL but a TMDL has not been developed (category 5), or a requires a TMDL and a TMDL has been developed (category 4a).

Of the 2,879 assessment units on the 305(b) list, 1,902 assessment units are impaired for at least one designated use. Table 8 shows the attainment (partial or nonsupport) per designated use for waterbodies impaired on the 2018/2020 305(b) list. Broken down by waterbody type, 1,836 rivers/streams are impaired totaling 8,945.2 river miles, 56 lakes/reservoirs are impaired totaling 89,449 acres, and 10 springs are impaired totaling 83,698 springshed acres.

Table 8. Number of assessment units impaired (either partial or nonsupport) for each designated use on the 2018/2020 305(b) list with the number of assessments units assessed for that designated use shown below.

Category	WAH	CAH	OSRW	PCR	SCR	FC	DWS
Partial Support	785	9	42	222	27	95	1
Nonsupport	630	4	32	644	99	20	0
Assessed	2472	88	389	1142	368	215	96

The impaired waters dashboard has a tab for each designated use, and can be used to explore waterbodies impaired for those uses throughout the commonwealth.

The impaired waters tab of the 305(b) workbook has specific information about all assessment units identified as impaired for one or more designated uses.

Causes of Impairment

There are 4,128 parameter-waterbody combinations on the impaired waters list (Figure 19). Those parameters fall into three reporting categories:

1. 2,809 are in category 5, meaning the parameter is a pollutant, identified as a cause of impairment, and requires a TMDL
    a. This is the 303(d) list
2. 710 are in category 4a, meaning the parameter is a pollutant, identified as a cause of impairment, and has an EPA-approved TMDL
3. 609 are in category 4c, meaning the parameter is a pollution, identified as a cause of impairment, but does not require a TMDL

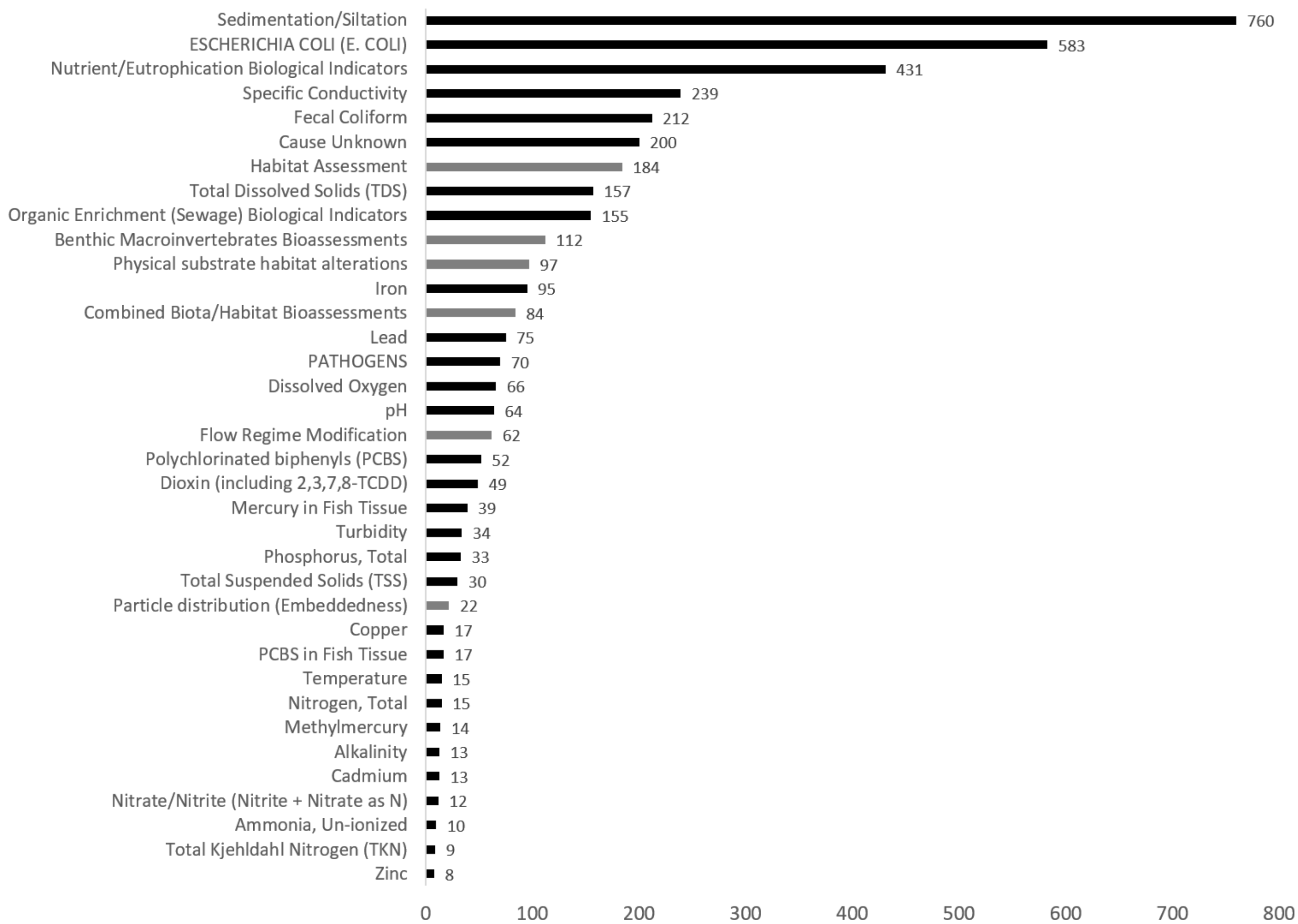


Figure 19. Number of impairments per parameter for those parameters identified as a cause on eight (8) or more occasions; **black** bars represent pollutants and gray bars represent pollutions.

Parameters can be grouped to explore types of impairments throughout the Commonwealth. Figure 20 shows the parameters identified as a cause of impairment on the 2018/2020 305(b) list grouped into the following themes:

1. Pathogens
2. Sedimentation/Turbidity
3. Nutrients/Organic Enrichment (OE)/Dissolved Oxygen
4. Biological Integrity/Habitat/Flow
    a. All parameters in this group are pollutions
5. Salinity/Total Dissolved Solids (TDS)/Chlorides/Sulfates
6. Metals and Mercury
7. Other (including Cause Unknown)
8. Dioxins/PCBs
9. pH/Acidity

For a more interactive approach, visit the cause of impairment dashboard, where a map is available to explore causes in the groups discussed above.

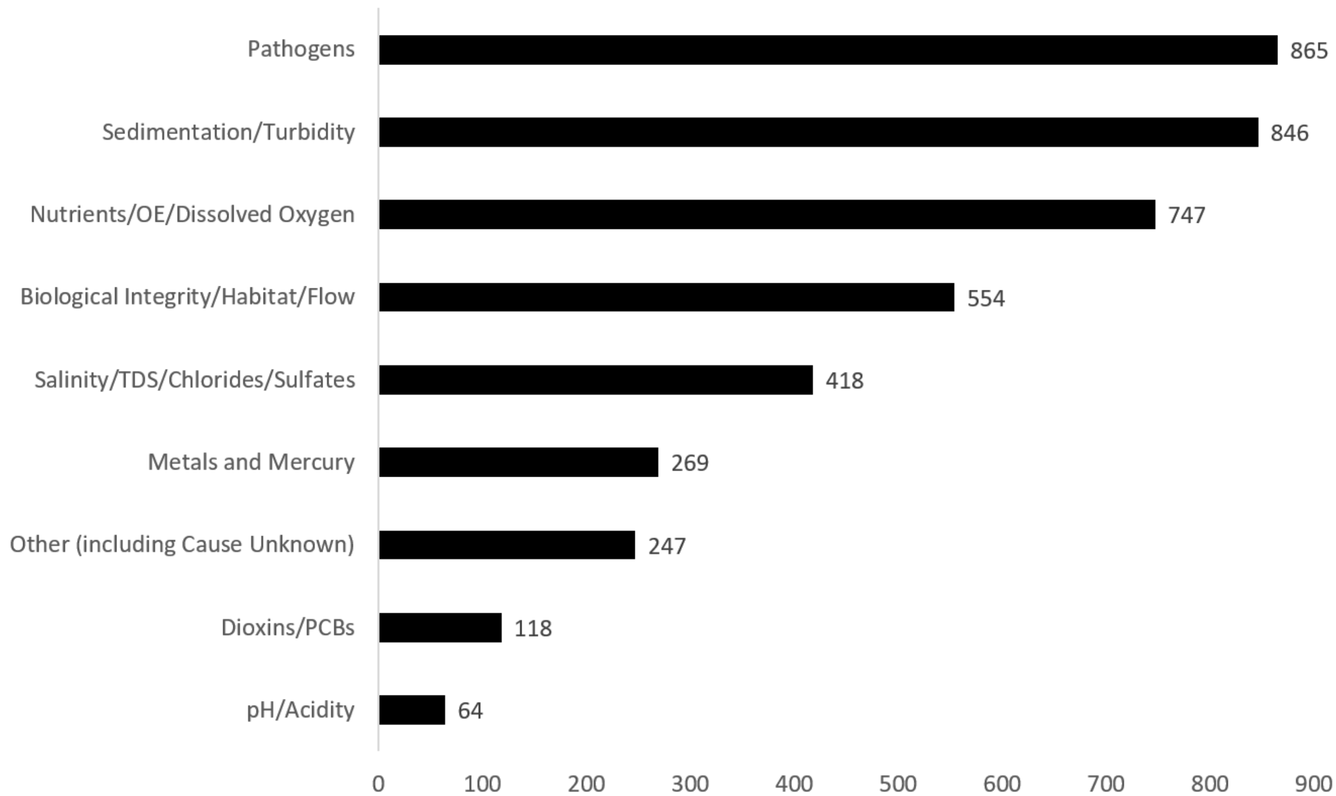


Figure 20. Types of impairments on the 2018/2020 305(b) list where parameters have been grouped into nine (9) themes to better understand the number and types of impairments throughout the Commonwealth.

The impaired waters tab of the [305(b) workbook] has specific information about all assessment units identified as impaired for one or more designated uses. Parameter level information for those identified as a cause of impairment is available per assessment unit, including if that parameter has a TMDL, the parameter's category, TMDL priority rank (if applicable), cycle first listed (if applicable), and suspected sources.

Waterbody Type Results

Assessment results per waterbody type per designated use, along with parameters identified as causes of impairment, are discussed in more detail in the following sections of this IR.

Rivers and Streams

River and stream assessments are the most common, which account for 2,744 of the 2,879 assessment units on Kentucky's 305(b) list. The total mileage of streams and rivers that have been assessed is 13,061.6 river miles. For those rivers and streams that have been assessed, the attainment per designated use is displayed in Figure 21.

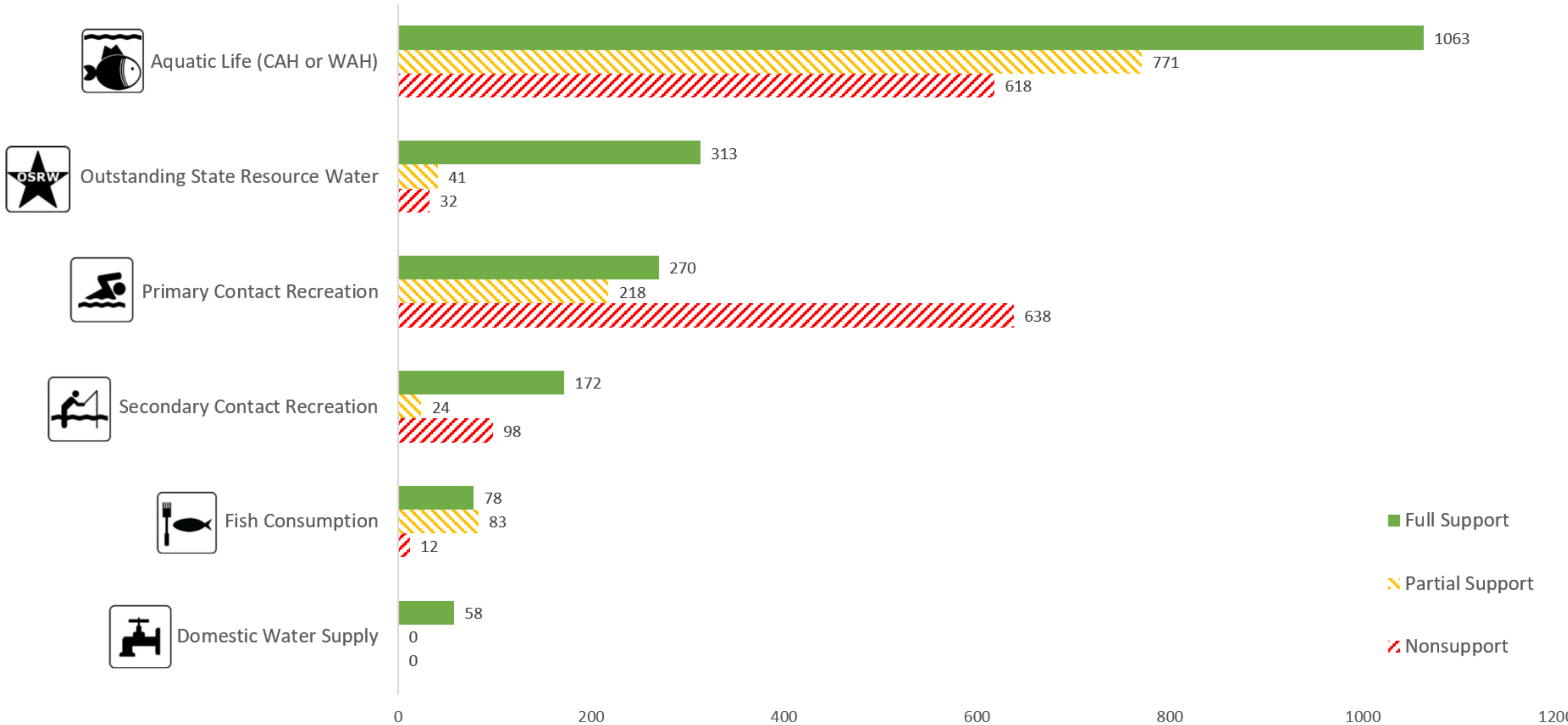


Figure 21. Number of assessment units that are full support, partial support, or nonsupport per designated use for rivers and streams that have been assessed for that use during this cycle or any prior cycle.

Rivers and Streams – Aquatic Life Uses (CAH and WAH)

For those rivers and streams that have been assessed for aquatic life, 43% fully support this designated use, while 31% partially support and 25% do not support the aquatic life designated use, meaning 57% are impaired (Figure 22).

Figure 22. Proportion of attainment for all rivers and streams that have been assessed for the aquatic life (WAH or CAH) designated use during this cycle or any prior cycle.

Looking at only the rivers and streams impaired for the aquatic life (CAH or WAH) designated use, 52 causes are associated with the impairments. Those that cause more than 20 impairments are displayed in Figure 23; (refer to the 305(b) workbook for all listing information). Some causes of impairment are pollutants (black in Figure 23), which require or have an EPA-approved TMDL, and other causes of impairment are pollutions (gray in Figure 23), which do not require a TMDL.

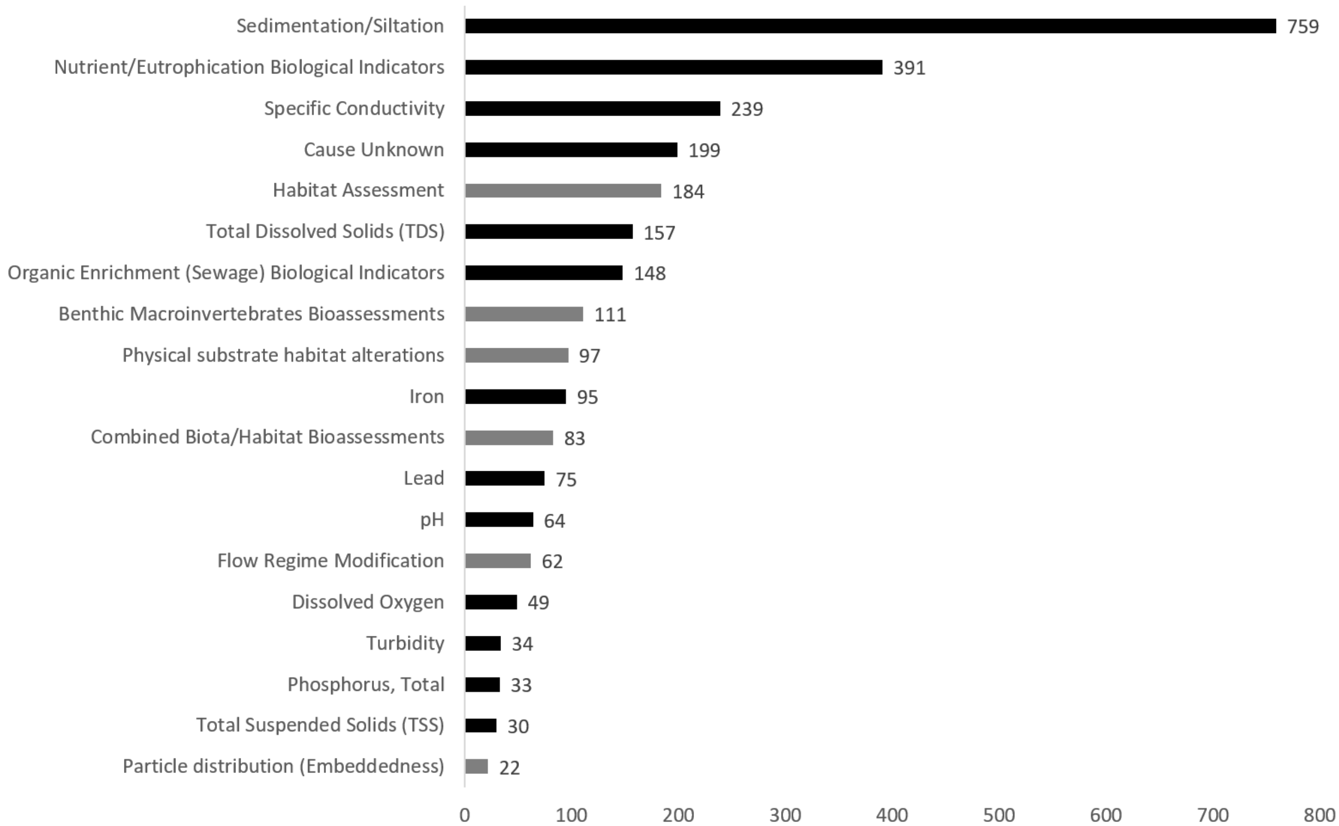


Figure 23. Number of impairments for the aquatic life (CAH or WAH) designated use by parameter for rivers and streams. Graph only shows those parameters that are identified as a cause of impairment in more than 20 assessment units. Pollutants in **black**; Pollutions in gray.

Rivers and Streams – Outstanding State Resource Water

For those rivers and streams that have been assessed for OSRW, 81% fully support this designated use, while 11% partially support and 8% do not support the OSRW designated use, meaning 19% are impaired (Figure 24).

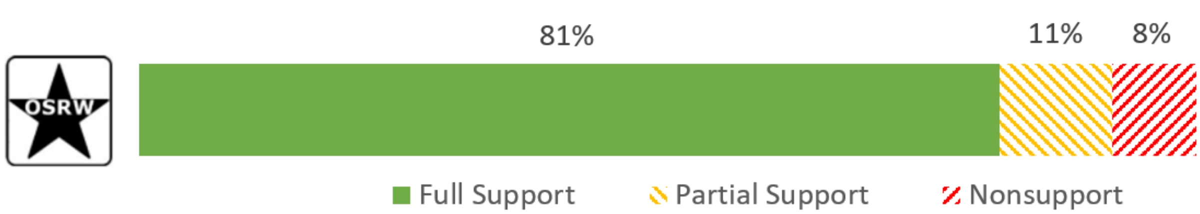


Figure 24. Proportion of attainment for all rivers and streams that have been assessed for the outstanding state resource water (OSRW) designated use during this cycle or any prior cycle.

Looking at only at the rivers and streams impaired for OSRW, 21 causes are associated with the impairments. Those that cause more than one impairment are displayed in Figure 25; (refer to the 305(b) workbook for all listing information). Some causes of impairment are pollutants (black in Figure 25), which require or have an EPA-approved TMDL, and other causes of impairment are pollutions (gray in Figure 25), which do not require a TMDL. Most OSRW impairments are associated with more than one cause of impairment, which is why there are more causes of impairments than there are rivers and streams impaired for OSRW.

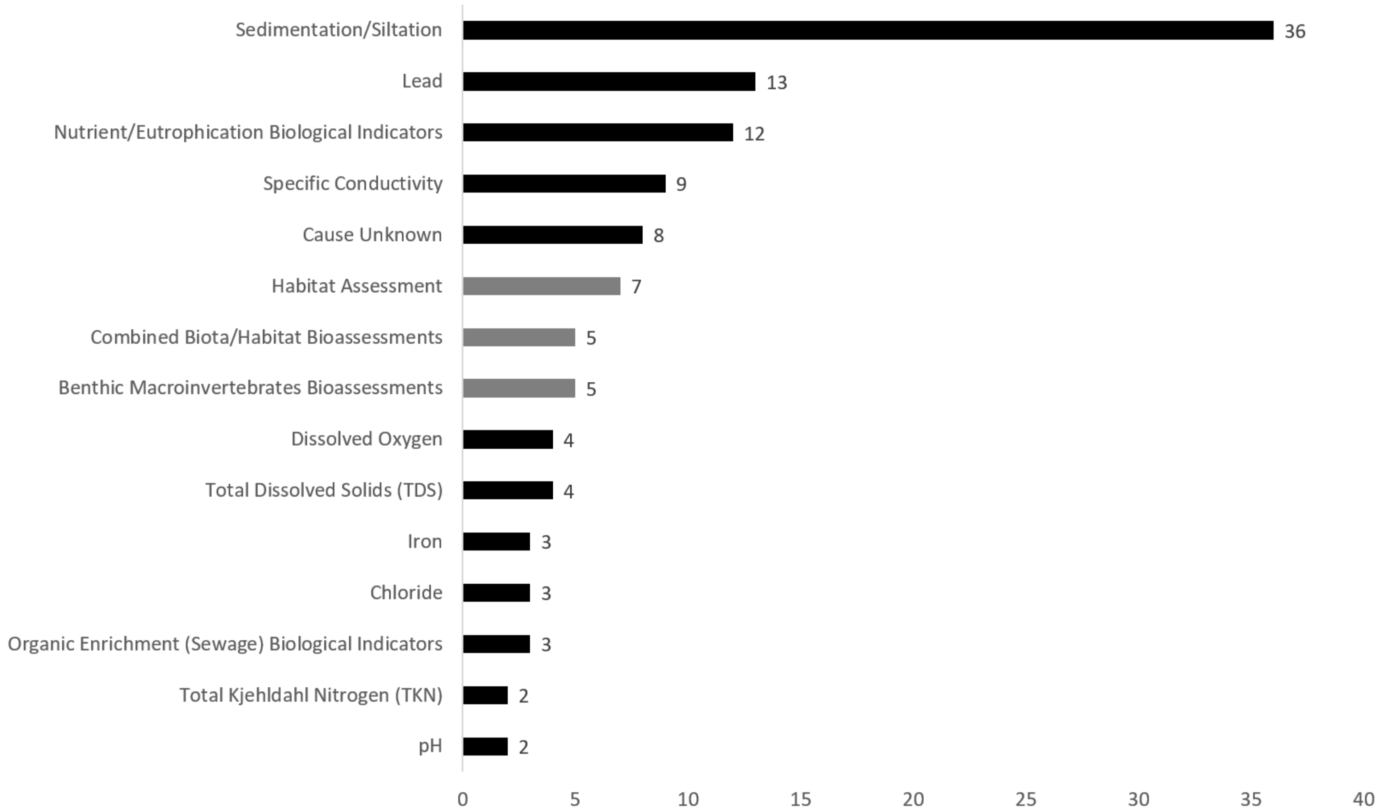


Figure 25. Number of impairments for the OSRW designated use by parameter for rivers and streams. Pollutants in black; Pollutions in gray.

Rivers and Streams – Recreational Uses (PCR and SCR)

For those rivers and streams that have been assessed for PCR, 24% fully support this designated use, while 19% partially support and 57% do not support the PCR designated use, meaning 76% are impaired (Figure 26).

For those rivers and streams that have been assessed for SCR, 59% fully support this designated use, while 8% partially support and 33% do not support the SCR designated use, meaning 41% are impaired (Figure 26).

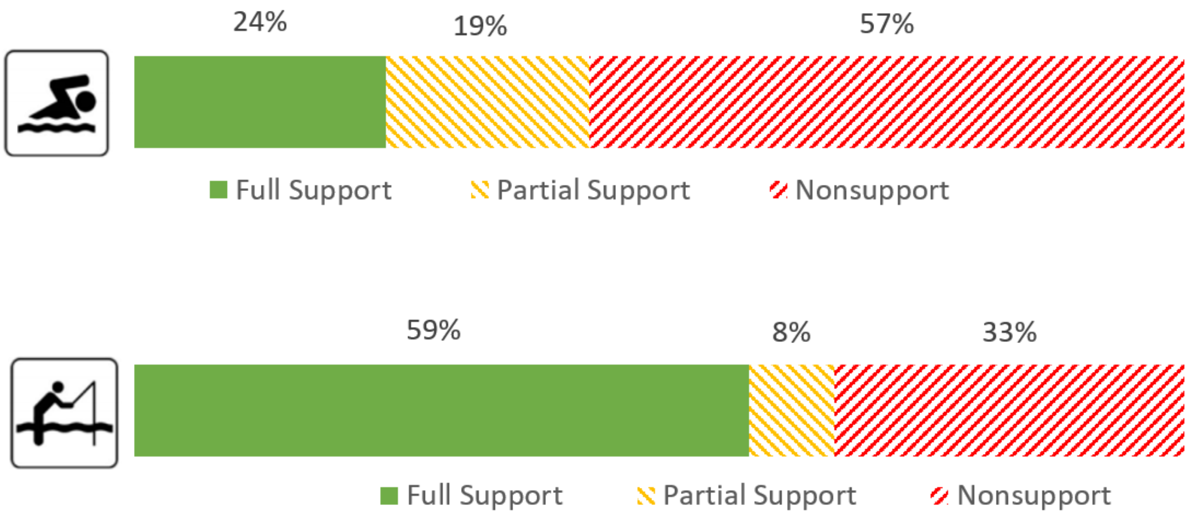


Figure 26. Proportion of attainment for all rivers and streams that have been assessed for the PCR and SCR designated uses during this cycle or any prior cycle.

Looking at only the rivers and streams impaired for the recreational uses (PCR and SCR), bacteria type impairments (*E. coli*, fecal coliform or pathogens) account for most of the listings, while there are 128 pH listings (Figure 27).

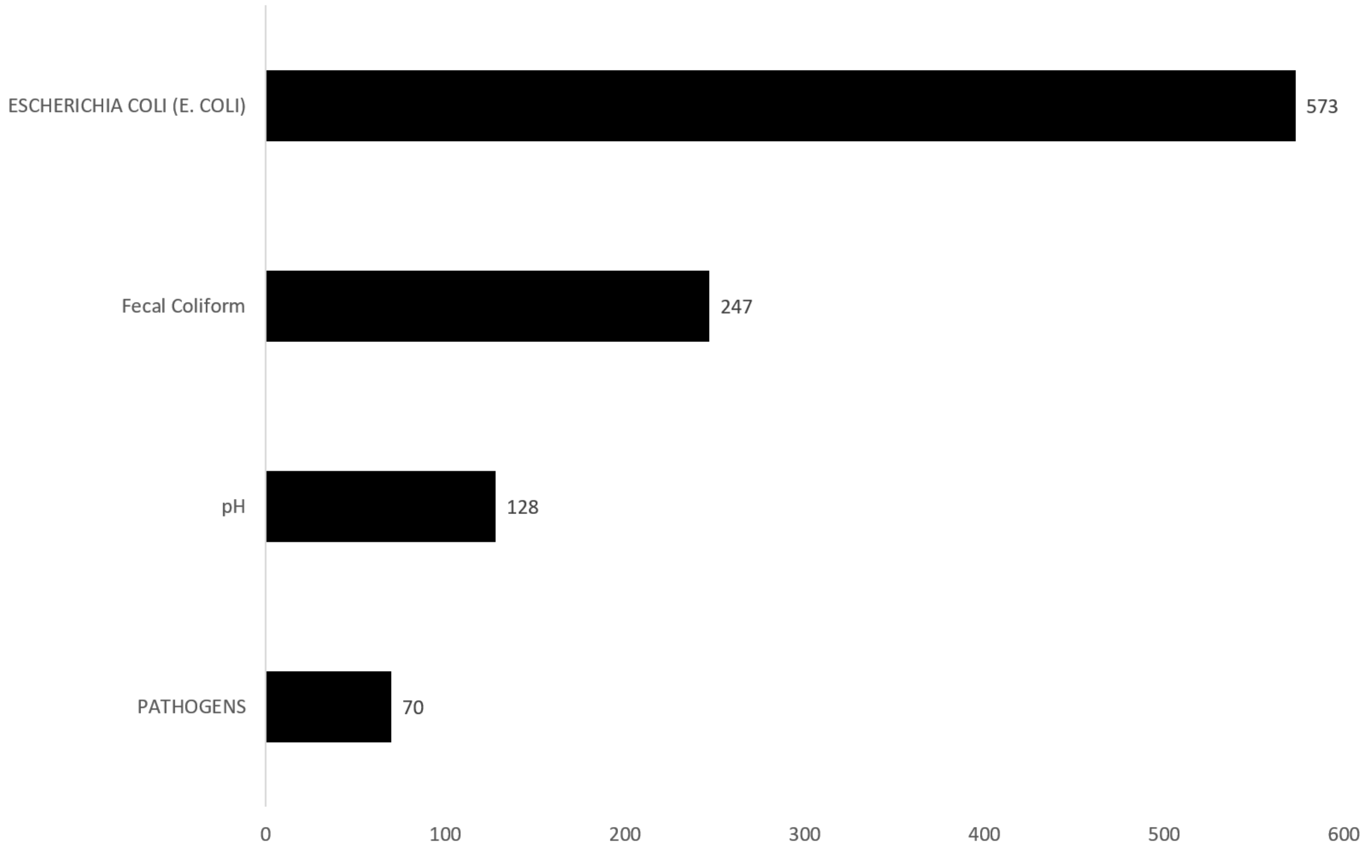


Figure 27. Number of impairments for the recreational uses (PCR and SCR) by parameter for rivers and streams.

Rivers and Streams – Fish Consumption

For those rivers and streams that have been assessed for fish consumption, 45% fully support this designated use, while 48% partially support and 7% do not support the fish consumption designated use, meaning 55% are impaired (Figure 28).

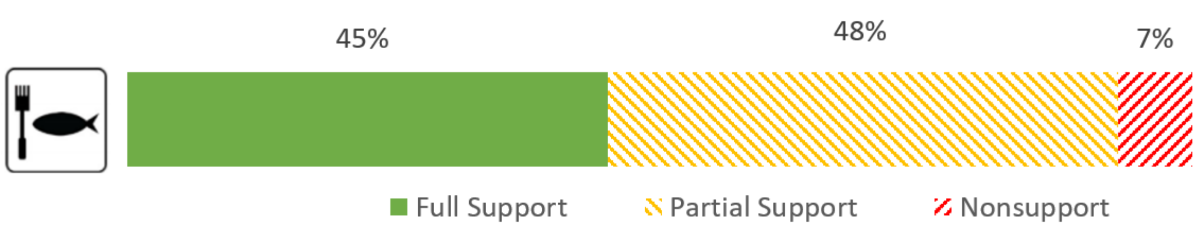


Figure 28. Proportion of attainment for all rivers and streams that have been assessed for the fish consumption designated use during this cycle or any prior cycle.

Looking at only the rivers and streams impaired for fish consumption, six causes are associated with the impairments. Those that cause 10 or more impairments are displayed in Figure 29; (refer to the 305(b) workbook for all listing information).

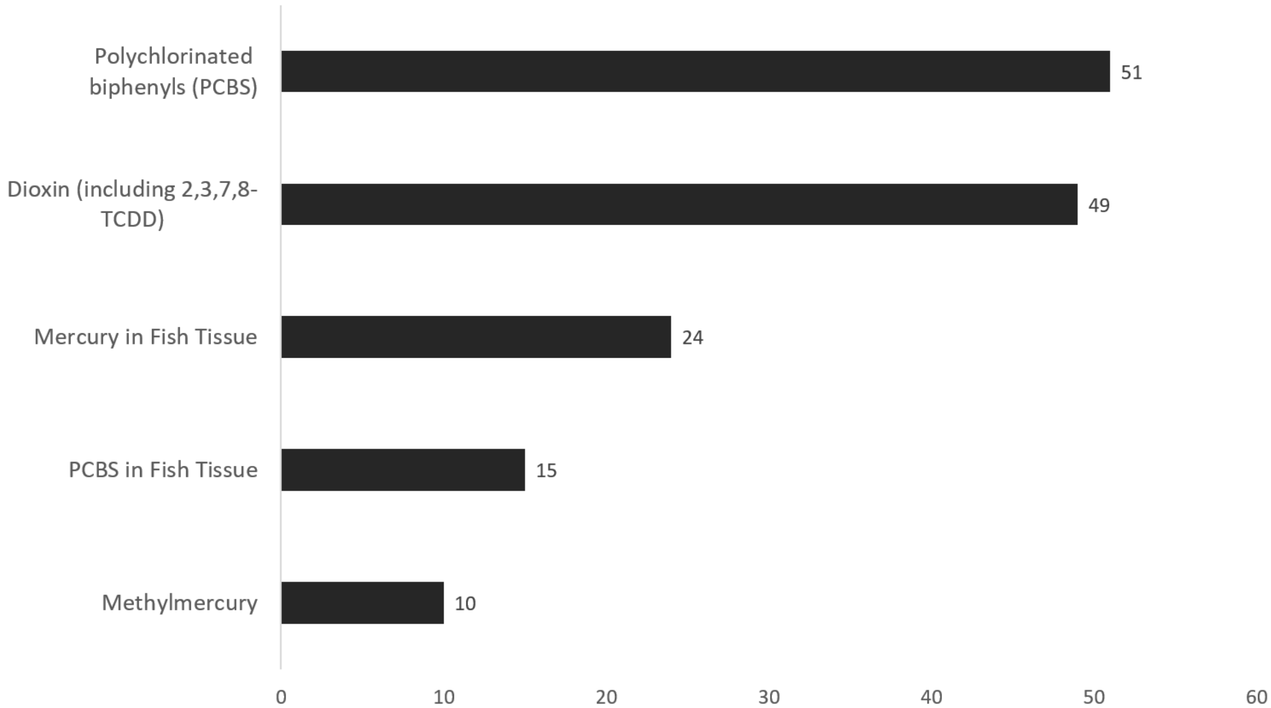



Figure 29. Number of impairments for the fish consumption designated use by parameter for rivers and streams.

Lakes and Reservoirs

Lake and reservoir assessments account for 121 of the 2,879 assessment units on Kentucky's 305(b) list. The total acres of lakes and reservoirs that have been assessed is 203,310 acres. For those lakes and reservoirs that have been assessed, the attainment per designated use is displayed in Figure 30.

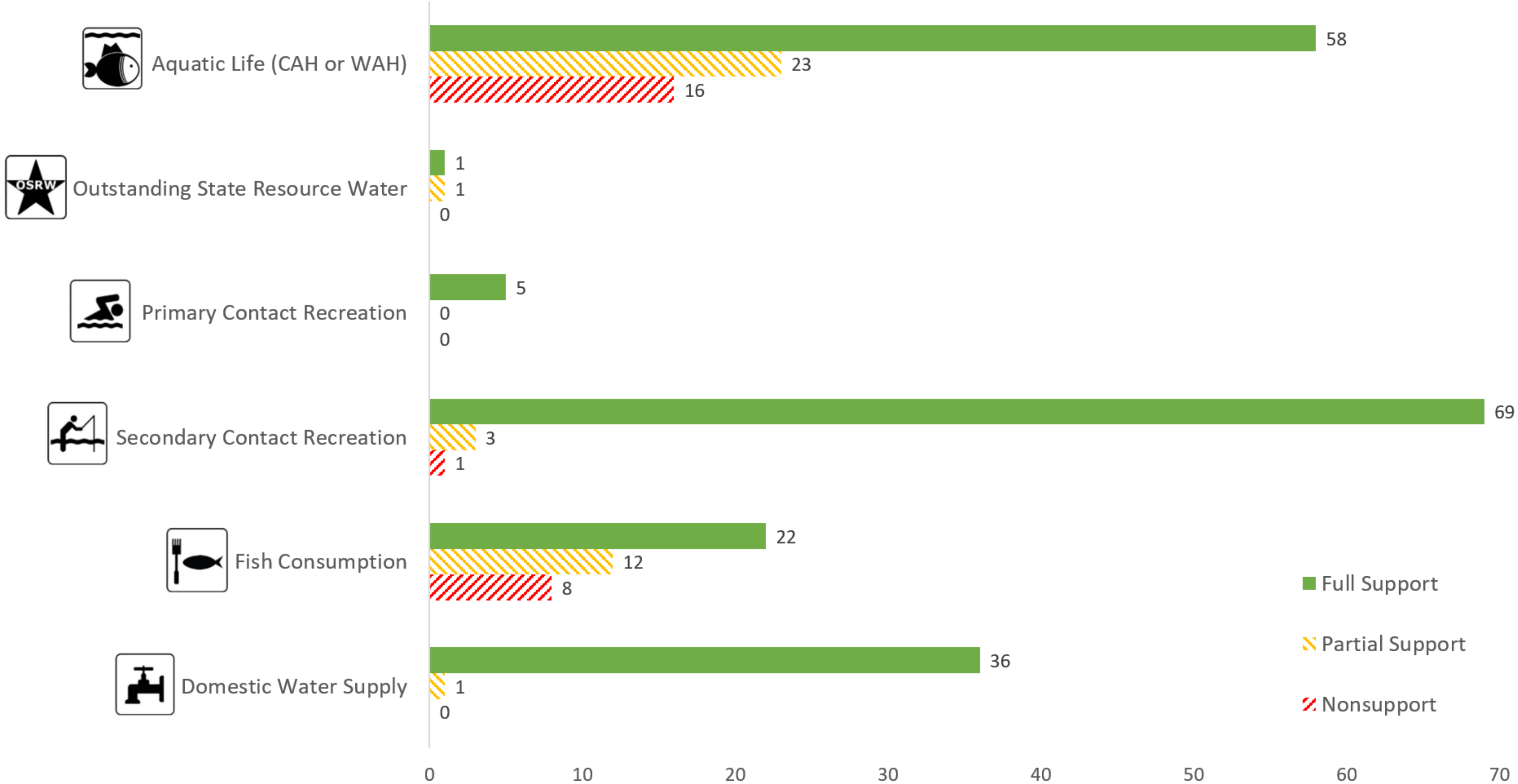


Figure 30. Number of assessment units that are full support, partial support, or nonsupport per designated use for lakes and reservoirs that have been assessed for that use during this cycle or any prior cycle.

Lakes and Reservoirs – Aquatic Life Uses (CAH and WAH)

For those lakes and reservoirs that have been assessed for aquatic life, 60% fully support this designated use, while 24% partially support and 16% do not support the aquatic life designated use, meaning 40% are impaired (Figure 31).

Figure 31. Proportion of attainment for all lakes and reservoirs that have been assessed for the aquatic life (WAH or CAH) designated use during this cycle or any prior cycle.

For most lakes and reservoirs assessed for aquatic life, a trophic status is determined from the trophic status index score (Figure 32). In Kentucky, most lakes and reservoirs assessed for the aquatic life designated use are mesotrophic or eutrophic. Most of the lakes and reservoirs identified as oligotrophic are in the mountains. For all trophic status narratives, refer to the 305(b) workbook.

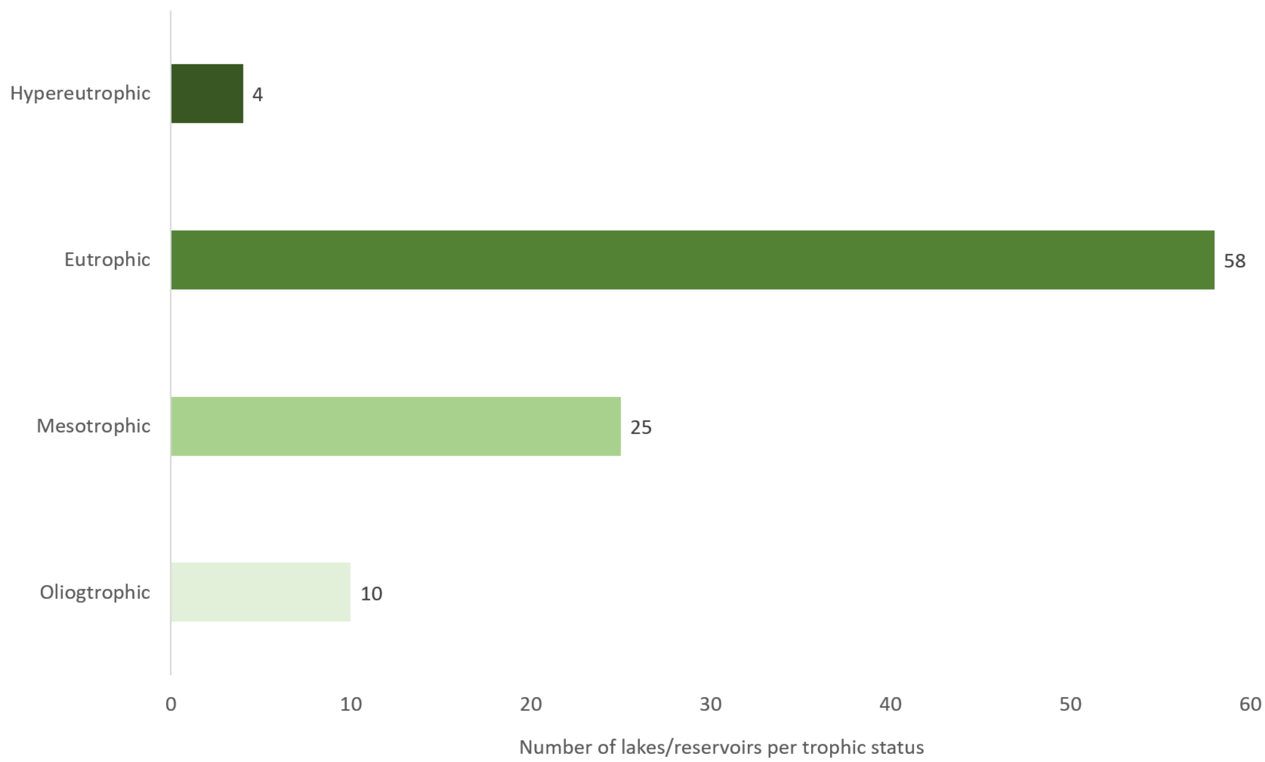
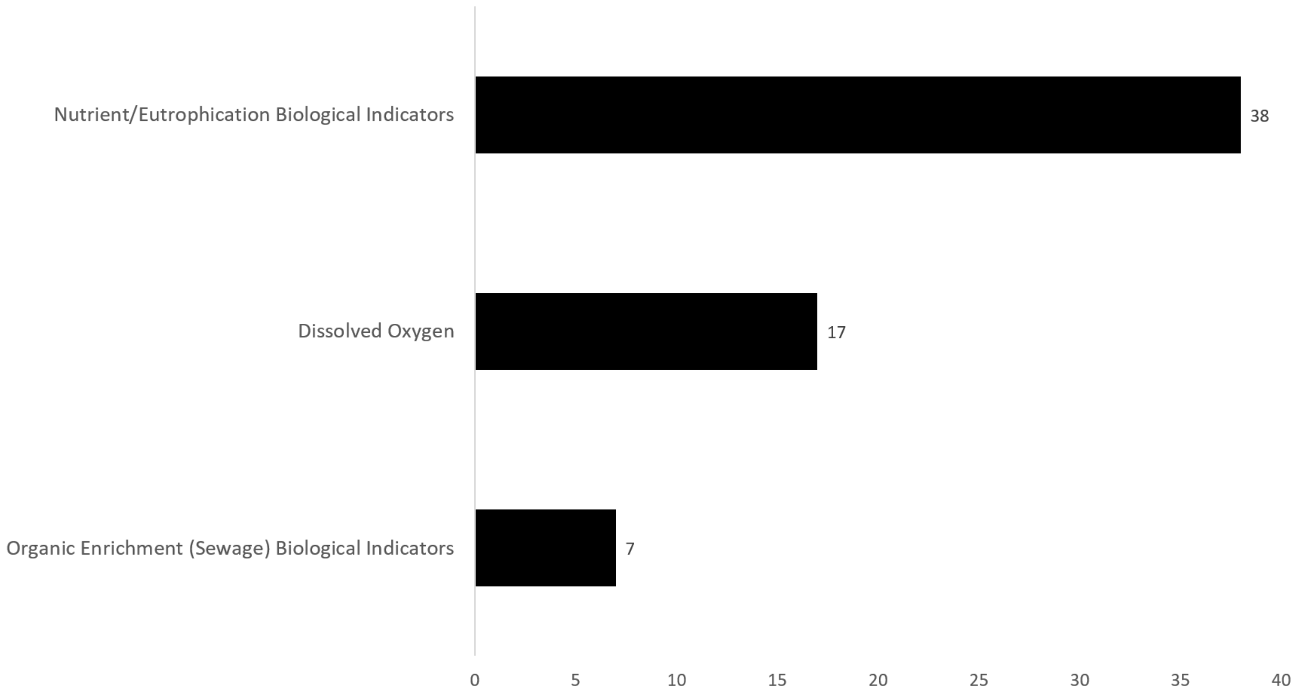


Figure 32. Trophic status for lakes and reservoirs that have been assessed for the aquatic life (CAH or WAH) designated use, where available.

Looking at only the lakes or reservoirs impaired for the aquatic life (CAH or WAH) designated use, three causes are associated with the impairments: nutrient/eutrophication biological indicators, dissolved oxygen, and organic enrichment (sewage) biological indicators (Figure 33). For all listing information, refer to the 305(b) workbook.



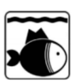


Figure 33. Number of impairments for the aquatic life (CAH or WAH) designated use by parameter for lakes and reservoirs.

Lakes and Reservoirs – Secondary Contact Recreation

For those lakes and reservoirs that have been assessed for SCR, 95% fully support this designated use, while 4% partially support and 1% do not support the SCR designated use, meaning 5% are impaired (Figure 34).

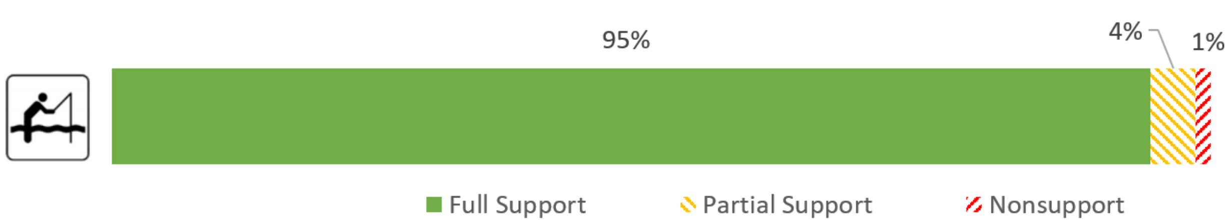


Figure 34. Proportion of attainment for all lakes and reservoirs that have been assessed for the secondary contact recreation designated use during this cycle or any prior cycle.

Looking at only the lakes or reservoirs impaired for SCR, three impairments are due to the pollution aquatic plants (macrophytes), one impairment is due to the pollutant nutrient/eutrophication biological indicators, and one impairment is due to the pollutant sedimentation/siltation. For all listing information, refer to the 305(b) workbook.

Lakes and Reservoirs – Fish Consumption

For those lakes and reservoirs that have been assessed for fish consumption, 52% fully support this designated use, while 29% partially support and 19% do not support the fish consumption designated use, meaning 48% are impaired (Figure 35).

Figure 35. Proportion of attainment for all lakes and reservoirs that have been assessed for the fish consumption designated use during this cycle or any prior cycle.

Looking at only the lakes or reservoirs impaired for fish consumption, three causes are associated with the impairments: mercury in fish tissue, methylmercury, and PCBs in fish tissue (Figure 36). For all listing information, refer to the 305(b) workbook.

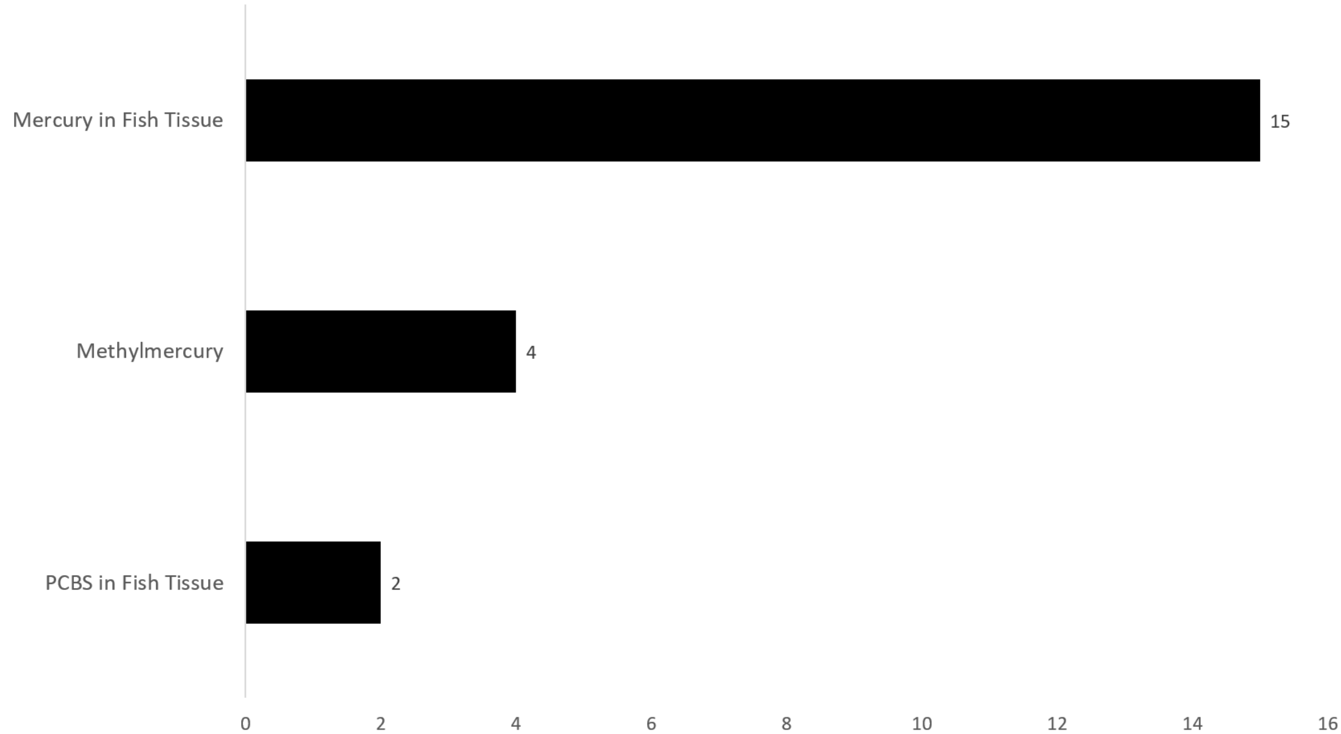


Figure 36. Number of impairments for the fish consumption designated use by parameter for lakes and reservoirs.

Springs

Spring assessments account for 14 of the 2,879 assessment units on Kentucky's 305(b) list. The total size of spring assessments (as represented by the springshed) is 168,055 acres.

Springs – Primary Contact Recreation

PCR is the most commonly assessed designated use for spring assessment units. Of the 14 spring assessment units on Kentucky's 2018/2020 305(b) list, 11 have been assessed for PCR. Of these 11 assessment units, one spring is full support, four springs are partial support, and six springs are nonsupport for PCR. The cause of impairment was always identified as E. coli. For all listing information, refer to the 305(b) workbook.

Program Level Results

Ambient Rivers and Streams

The ambient rivers and streams network is a network of sites throughout the Commonwealth where the same 72 primary sites and 104 rotating sites are sampled on a BMU sampling framework. These sites have their data used for assessment purposes when a new 5-year period is available for review. This is what determines what BMU is the BMU of focus for each IR. Below is a summary of attainment and the causes related to impairment for the aquatic life (CAH or WAH) and PCR designated uses for each BMU of focus for this IR (Salt-Licking, Upper Cumberland and Four Rivers, Green-Tradewater). Since the Ambient Rivers and Streams program focuses on collecting water chemistry and bacteria, most of the causes of impairment are related to these two data types.

Salt-Licking BMU

Aquatic Life (CAH or WAH)

Of the 33 waterbodies assessed for aquatic life (CAH or WAH) by the Ambient Rivers and Streams program in the Salt-Licking BMU, 39% were found to be impaired for the aquatic life (CAH or WAH) designated use, which relates to partial or nonsupport, while 61% were found to fully support the use (Figure 37).

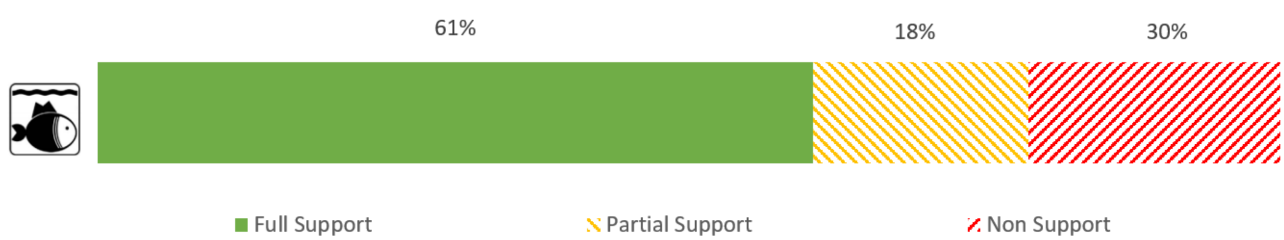


Figure 37. Proportion of attainment for rivers and streams assessed for the aquatic life (CAH or WAH) designated use where data collected by the Ambient Rivers and Streams program from the Salt-Licking BMU contributed to the attainment decision.

Looking at only the impaired segments from the Salt-Licking BMU where data from the Ambient Rivers and Streams program were used as part of the assessment decision, the top three causes of impairment are by the pollutants lead, iron, and sedimentation/siltation (Figure 38). Organic enrichment (sewage) biological indicators, nutrient/eutrophication biological indicators, and cause unknown are also identified as causes of impairment for assessment units related to the Ambient Rivers and Streams network from this BMU (Figure 38).

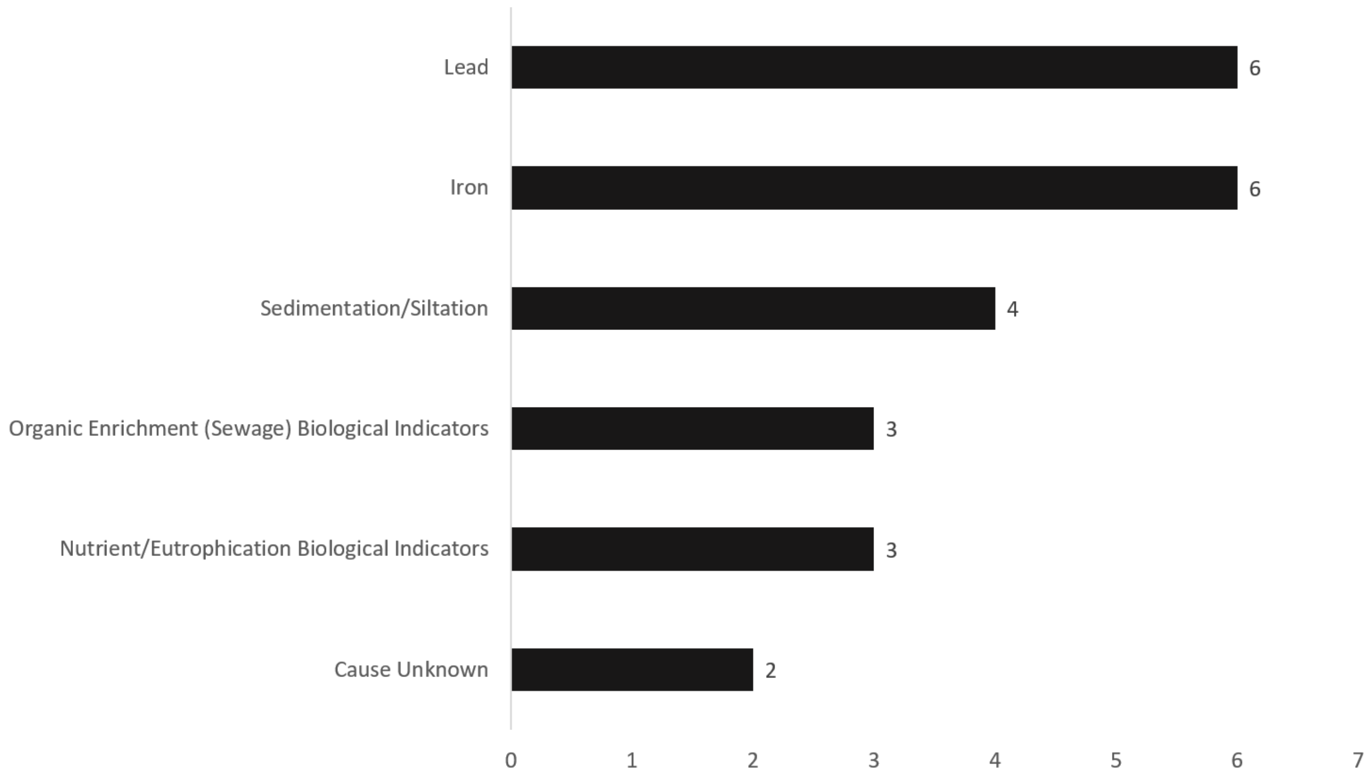


Figure 38. Number of impairments for the aquatic life (CAH or WAH) designated use by pollutant where data collected by the Ambient Rivers and Streams program from the Salt-Licking BMU contributed to the attainment decision.

Primary Contact Recreation

Of the 34 waterbodies assessed for PCR by the Ambient Rivers and Streams program in the Salt-Licking BMU, 79% were found to be impaired for the PCR designated use, which relates to partial or nonsupport, while 21% were found to fully support the use (Figure 39).

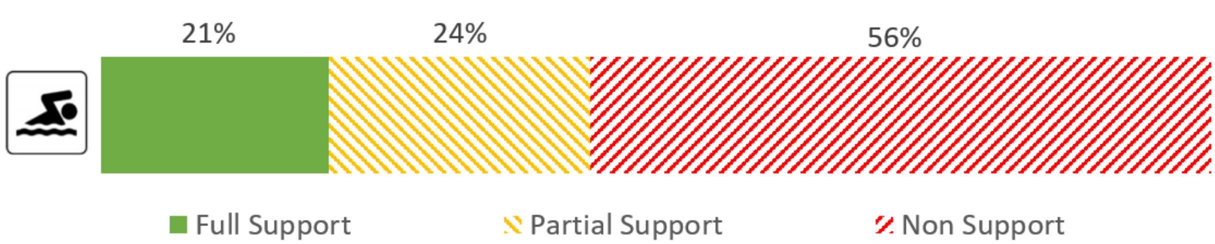


Figure 39. Proportion of attainment for rivers and streams assessed for the primary contact recreation designated use where data collected by the Ambient Rivers and Streams program from the Salt-Licking BMU contributed to the attainment decision.

Looking at only the impaired segments from the Salt-Licking BMU where data from the Ambient Rivers and Streams program were used as part of the assessment decision, all PCR impairments are due to bacteria-related parameters, such as pathogens or *E. coli.*

Upper Cumberland and Four Rivers BMU

Aquatic Life (CAH or WAH)

Of the 44 waterbodies assessed for aquatic life (CAH or WAH) by the Ambient Rivers and Streams program in the Upper Cumberland and Four Rivers BMU, 50% were found to be impaired for the aquatic life (CAH or WAH) designated use, which relates to partial or nonsupport, while 50% were found to fully support the use (Figure 40).

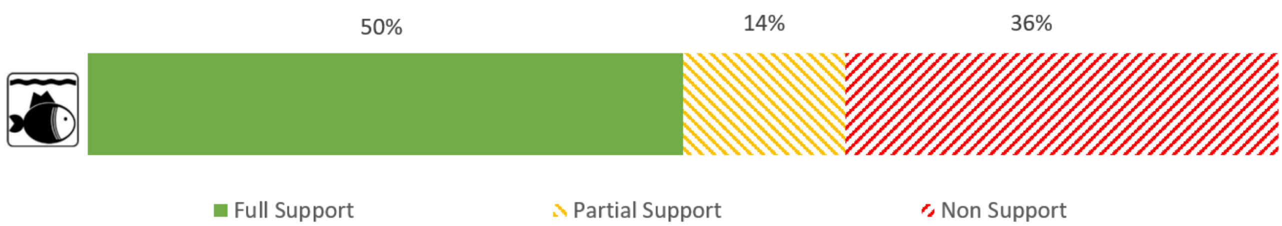


Figure 40. Proportion of attainment for rivers and streams assessed for the aquatic life (CAH or WAH) designated use where data collected by the Ambient Rivers and Streams program from the Upper Cumberland and Four Rivers BMU contributed to the attainment decision.

Looking at only the impaired segments from the Upper Cumberland and Four Rivers BMU where data from the Ambient Rivers and Streams program were used as part of the assessment decision, the top three causes of impairment are by the pollutants lead, iron, and copper (Figure 41). Sedimentation/siltation and nutrient/eutrophication biological indicators are identified as causes for seven and six assessment units, respectively, related to the Ambient Rivers and Streams network from this BMU (Figure 41).

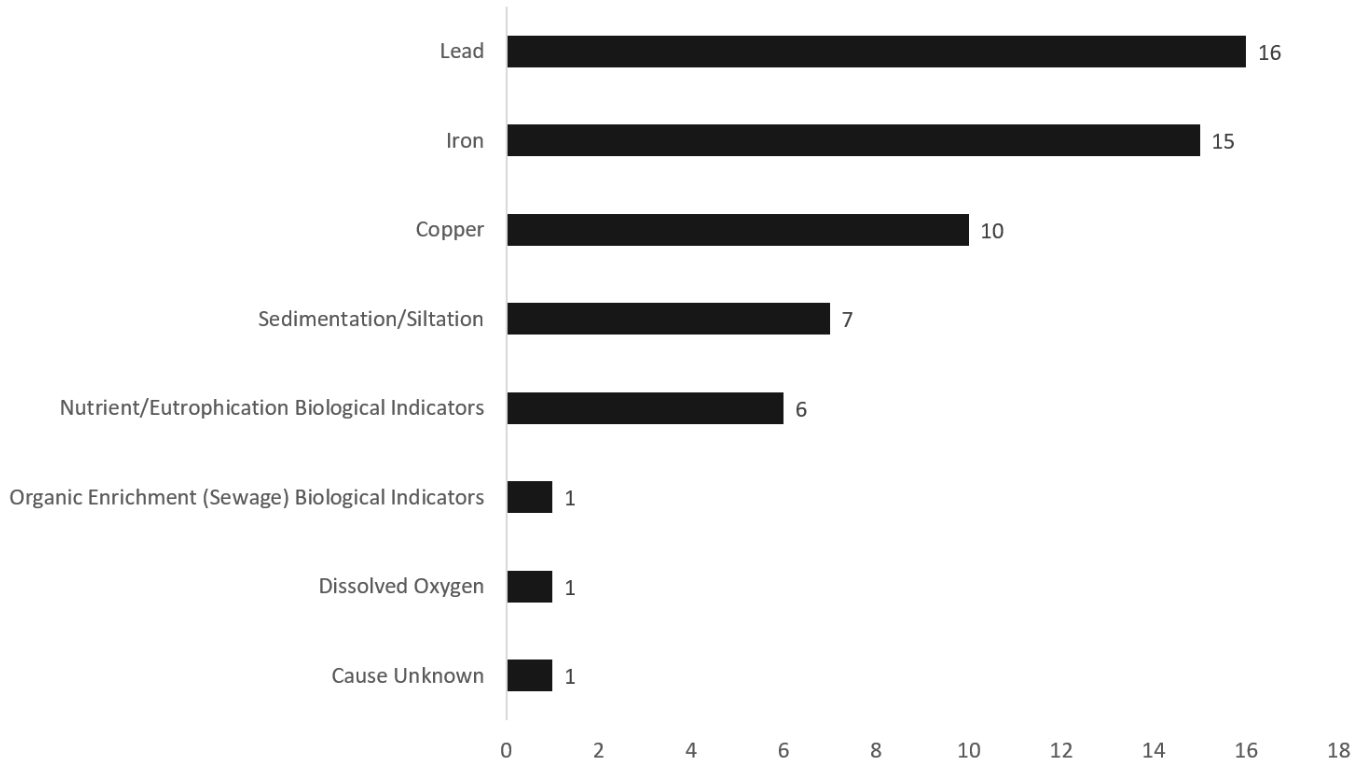


Figure 41. Number of impairments for the aquatic life (CAH or WAH) designated use by pollutant where data collected by the Ambient Rivers and Streams program from the Upper Cumberland and Four Rivers BMU contributed to the attainment decision.

Primary Contact Recreation

Of the 45 waterbodies assessed for PCR by the Ambient Rivers and Streams program in the Upper Cumberland and Four Rivers BMU, 44% were found to be impaired for the PCR designated use, which relates to partial or nonsupport, while 56% were found to fully support the use (Figure 42).

Figure 42. Proportion of attainment for rivers and streams assessed for the primary contact recreation designated use where data collected by the Ambient Rivers and Streams program from the Upper Cumberland and Four Rivers BMU contributed to the attainment decision.

Looking at only the impaired segments from the Upper Cumberland and Four Rivers BMU where data from the Ambient Rivers and Streams program were used as part of the assessment decision, all PCR impairments are due to bacteria-related parameters, such as pathogens or *E. coli.*

Green-Tradewater BMU

Aquatic Life (CAH or WAH)

Of the 57 waterbodies assessed for aquatic life (CAH or WAH) by the Ambient Rivers and Streams program in the Green-Tradewater BMU, 42% were found to be impaired for the aquatic life (CAH or WAH) designated use, which relates to partial or nonsupport, while 58% were found to fully support the use (Figure 43).

Figure 43. Proportion of attainment for rivers and streams assessed for the aquatic life (CAH or WAH) designated use where data collected by the Ambient Rivers and Streams program from the Green-Tradewater BMU contributed to the attainment decision.

Looking at only the impaired segments from the Green-Tradewater BMU where data from the Ambient Rivers and Streams program were used as part of the assessment decision, the top three causes of impairment are by the pollutants iron, lead, and dissolved oxygen (Figure 44). Sedimentation/siltation, organic enrichment (sewage) biological indicators, nutrient/eutrophication biological indicators, and specific conductivity are identified as causes for three or more assessment units related to the Ambient Rivers and Streams network from this BMU (Figure 44).

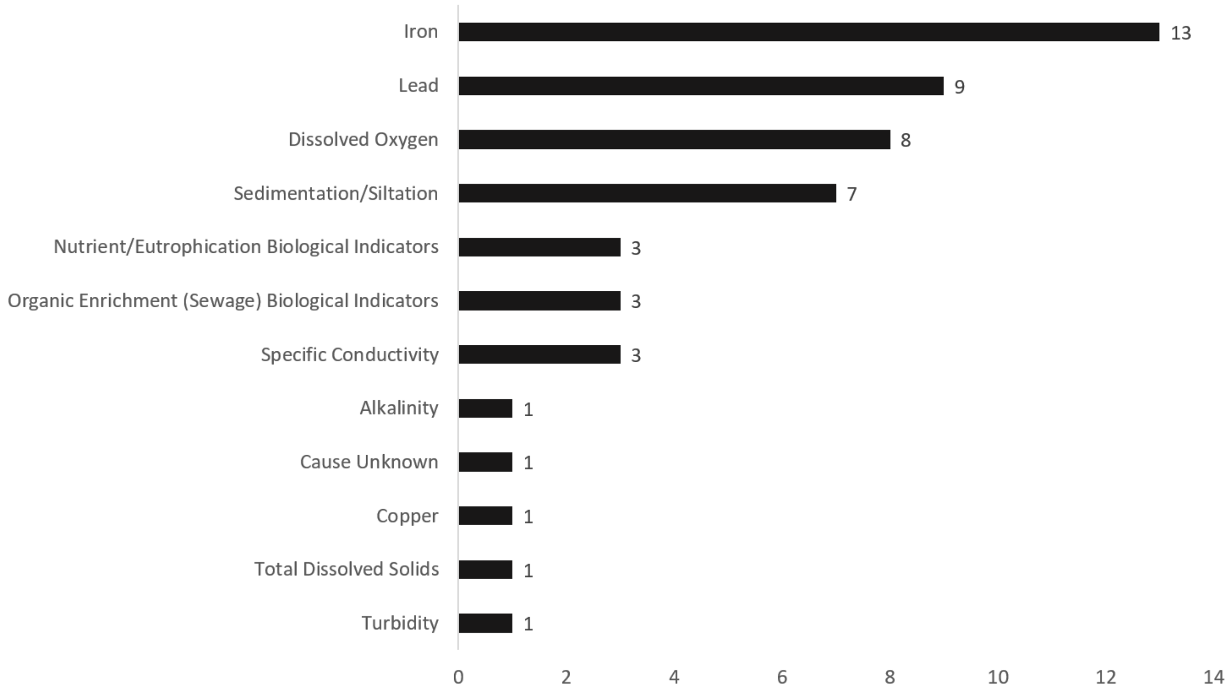



Figure 44. Number of impairments for the aquatic life (CAH or WAH) designated use by pollutant where data collected by the Ambient Rivers and Streams program from the Green-Tradewater BMU contributed to the attainment decision.

Primary Contact Recreation

Of the 59 waterbodies assessed for PCR by the Ambient Rivers and Streams program in the Green-Tradewater BMU, 58% were found to be impaired for PCR designated use, which relates to partial or nonsupport, while 42% were found to fully support the use (Figure 45).

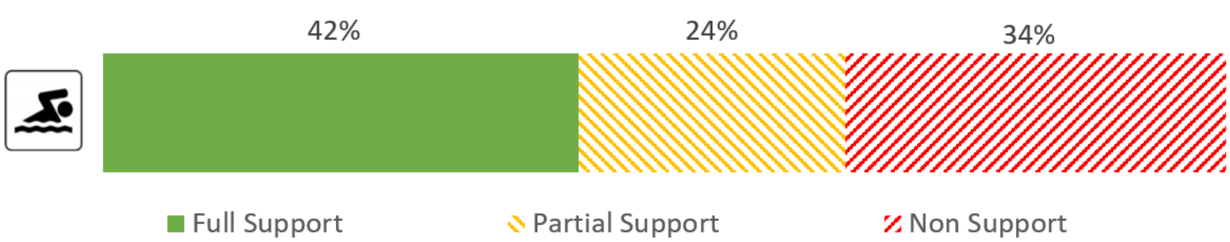


Figure 45. Proportion of attainment for rivers and streams assessed for the primary contact recreation designated use where data collected by the Ambient Rivers and Streams program from the Green-Tradewater BMU contributed to the attainment decision.

Looking at only the impaired segments from the Green-Tradewater BMU where data from the Ambient Rivers and Streams program were used as part of the assessment decision, all PCR impairments are due to bacteria-related parameters, such as pathogens or *E. coli.*

Ambient Lakes

Kentucky lakes assessed during this IR cycle were sampled on a Watershed Management Framework Initiative approach, where the same 108 lakes are sampled on a 5-year BMU sampling rotation. For this IR, 60 lakes from the Salt-Licking, Upper Cumberland and Four Rivers, or Green-Tradewater BMUs were sampled and had their data used for assessment. Below is a summary of attainment and the causes related to impairment for the aquatic life (CAH or WAH) and SCR designated uses, the two designated uses most often assessed using data collected by the Ambient Lake program.

Aquatic Life (CAH or WAH)

Of the 50 waterbodies assessed by the Ambient Lakes program, 58% were found to be impaired for the aquatic life (CAH or WAH) designated use, which relates to partial or nonsupport, while 42% were found to fully support the use during this reporting cycle (Figure 46).

Figure 46. Proportion of attainment for lakes and reservoirs assessed for the aquatic life (CAH or WAH) designated use where data collected by the Ambient Lakes program contributed to the attainment decision.

Looking at only the impaired waterbodies, three parameters are identified as causes of impairment: nutrient/eutrophication biological indicators, dissolved oxygen, and organic enrichment (sewage) biological indicators (Figure 47).

Secondary Contact Recreation

Of the 33 waterbodies assessed by the Ambient Lakes program, 100% were found to fully support the SCR use during this reporting cycle.

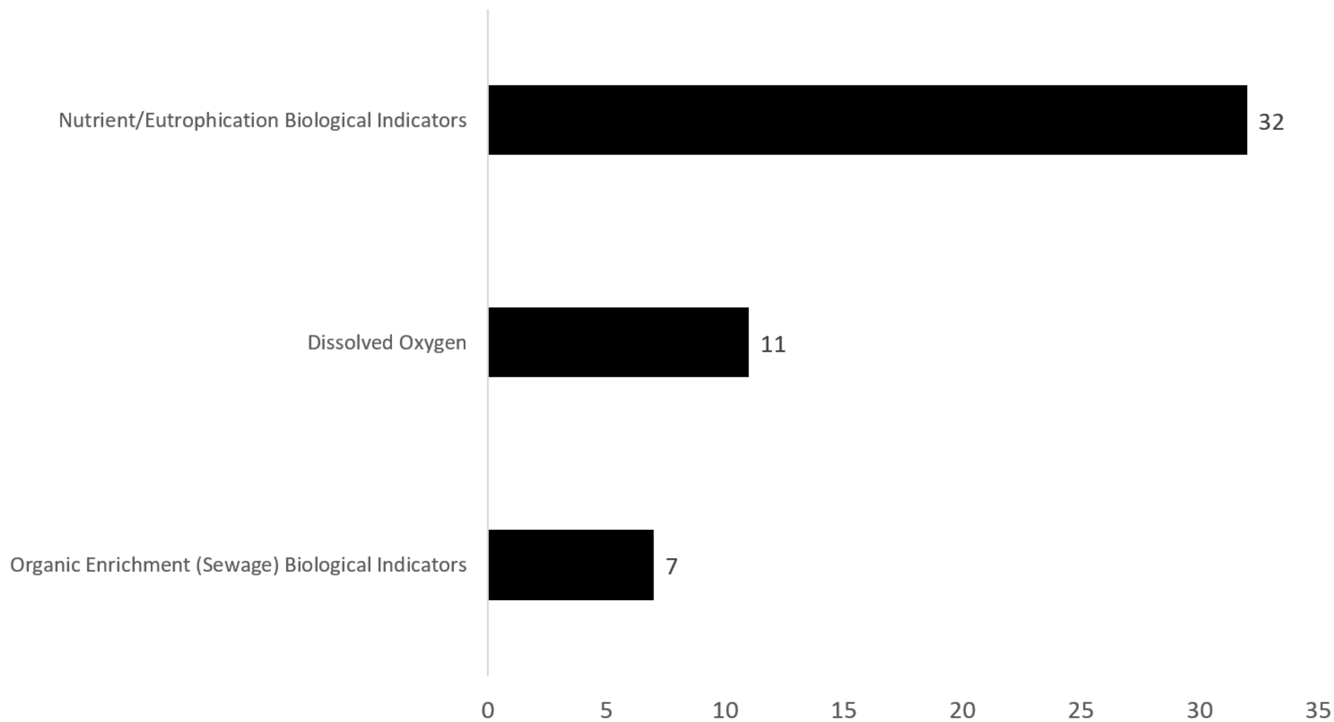


Figure 47. Number of impairments for the aquatic life (CAH or WAH) designated use by pollutant where data collected by the Ambient Lakes program contributed to the attainment decision.

Probabilistic Survey of Wadeable Streams

The probabilistic program sampled 50 random sites from wadeable streams within the Salt-Licking BMU in 2014 and the Upper Cumberland and Four Rivers BMU in 2015. During a site visit, the probabilistic program collects biological community data, collects a one-time grab sample for water chemistry, takes *in situ* measurements, makes field observations, and completes a habitat assessment form.

Attainment decisions made where data from the probabilistic program contributed to the assessment are presented below for the aquatic life (CAH or WAH) designated use. For those waters found to be impaired, parameters identified as causes are also discussed. Since this program focuses on biological community data and habitat assessment, many of the impairments are related to this data type.

Attainment

Salt-Licking BMU

Of the approximately 50 sites randomly selected and sampled by the probabilistic program in the Salt-Licking BMU, 38% were found to fully support the aquatic life (CAH or WAH) designated use, 61% were found to be impaired (partial or nonsupport), and 2% could not be assessed (Figure 48).

Upper Cumberland and Four Rivers BMU

Of the approximately 50 sites randomly selected and sampled by the probabilistic program in the Upper Cumberland and Four Rivers BMU, 31% were found to fully support the aquatic life (CAH or WAH) designated use, 63% were found to be impaired (partial or nonsupport), and 6% could not be assessed (Figure 48).

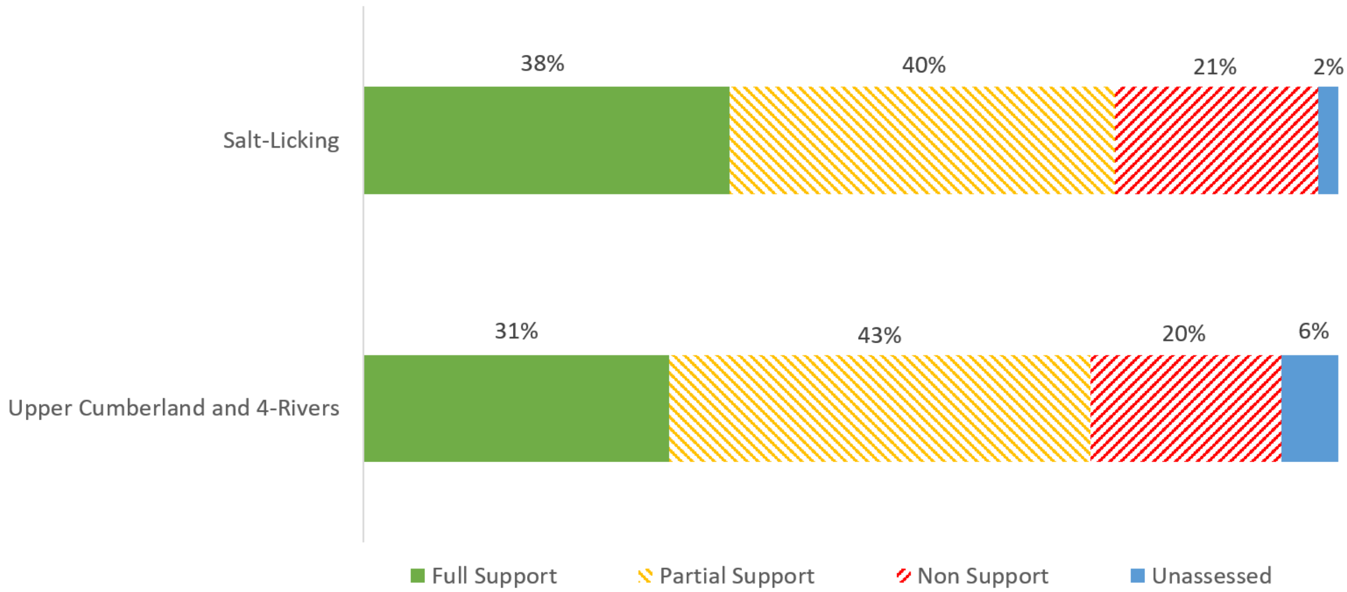



Figure 48. Proportion of attainment for rivers and streams assessed for the aquatic life (CAH or WAH) designated use where data collected by the probabilistic program from the Salt-Licking and Upper Cumberland and Four Rivers BMUs contributed to the attainment decision.

Cause of Impairment

Salt-Licking BMU

Looking at only the impaired segments from the Salt-Licking BMU where data from probabilistic program were used as part of the assessment decision, most of the impairments are attributed to pollutions, such as combined biota/habitat assessments, combination benthic/fishes bioassessments, and habitat assessment (Figure 49). The four pollutants identified as causes of impairment for this BMU were sedimentation/siltation, nutrient/eutrophication biological indicators, pH, and specific conductivity (Figure 49).

Upper Cumberland and Four Rivers BMU

Looking at only the impaired segments from the Upper Cumberland and Four Rivers BMU where data from probabilistic program were used as part of the assessment decision, most of the impairments are attributed to pollutions, such as combined biota/habitat assessments, combination benthic/fishes bioassessments, and habitat assessment (Figure 49). The four pollutants identified as causes of impairment for this BMU were sedimentation/siltation, nutrient/eutrophication biological indicators, iron, and lead (Figure 49).

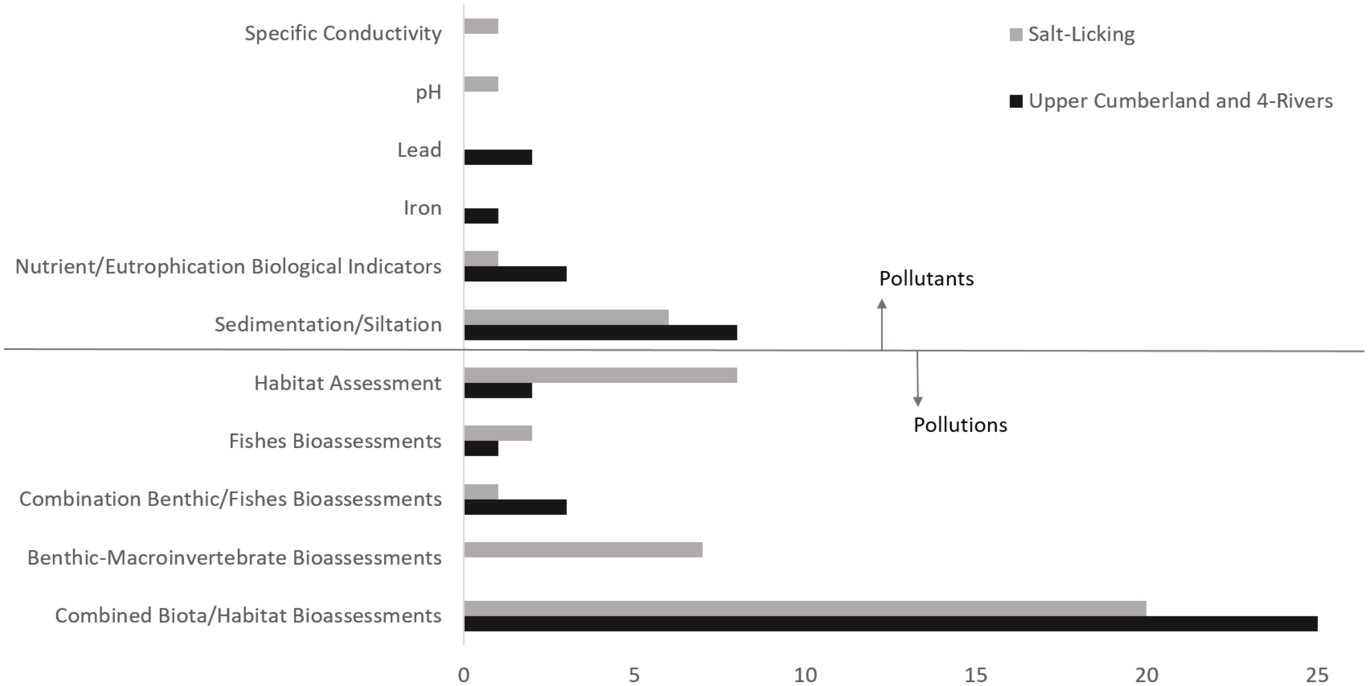


Figure 49. Number of impairments for the aquatic life (CAH or WAH) designated use by parameter where data collected by the probabilistic program from the Salt-Licking and Upper Cumberland and Four Rivers BMUs contributed to the attainment decision. Pollutants and pollutions are separated in figure, top to bottom.

Reference Reach

During this 2018/2020 reporting cycle, 61 assessment units had their assessments updated using data collected by the reference reach monitoring program. This program collects data on water quality, sediment quality, habitat condition, and biological communities.

Attainment decisions are presented below for the aquatic life (CAH or WAH) designated use and the OSRW designated use, where applicable (47 of the 61 assessment units). For those waters found to be impaired, parameters identified as causes are also discussed. Since the reference reach program focuses on biological community data and habitat assessment, many of the impairments are related to this data type.

Attainment

Of the approximately 61 sites sampled by the reference reach program where the data contributed to an assessment decision for the aquatic life (CAH or WAH) designated use, 67% were found to be full support, while 33% were found to be impaired (partial or nonsupport) (Figure 50).

Some of the reference reach sites are located on waterbodies designated as OSRWs. For these reference reach sites that are located along OSRW waterbodies, where data collected by the reference reach program contributed to an assessment decision, 72% were found to fully support the OSRW designated use, 23% were found to be impaired (partial or nonsupport), and 4% were not assessed for the use (Figure 50).

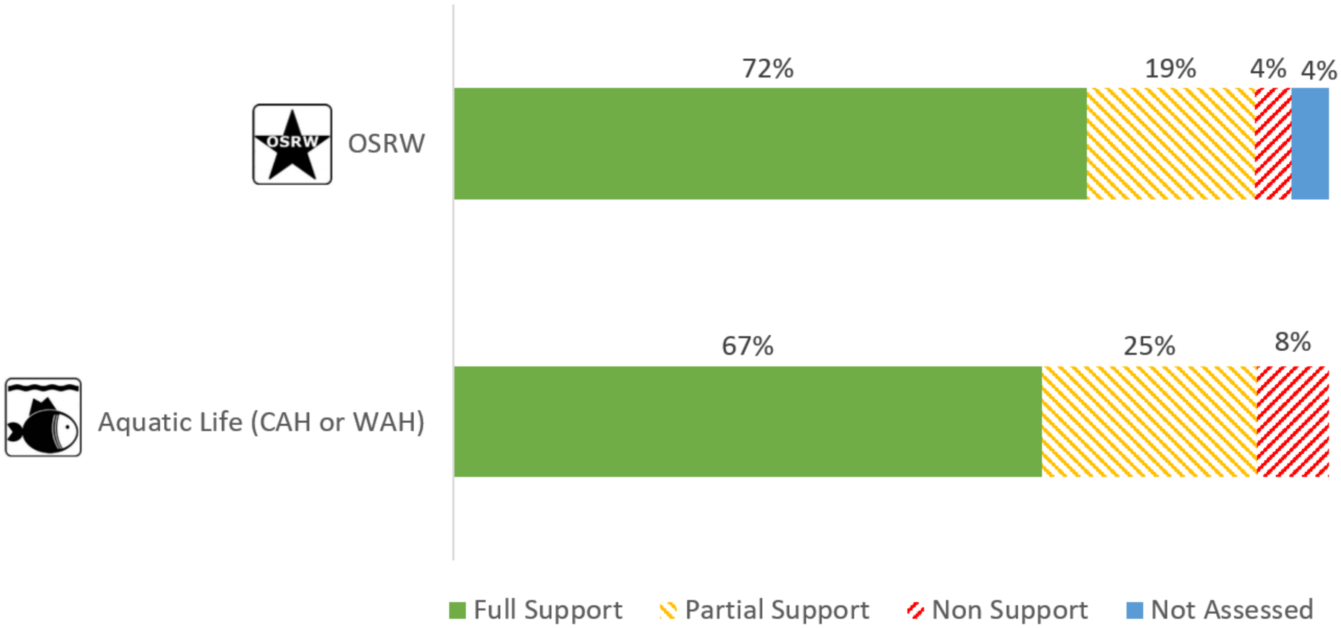


Figure 50. Proportion of attainment for rivers and streams assessed for the aquatic life (CAH or WAH) and outstanding state resource water (OSRW) designated uses where data collected by the reference reach program contributed to the attainment decision.

Cause of Impairment

Looking at only the impaired segments where data from the reference reach program were used as part of the assessment decision, most of the impairments are attributed to pollutions, such as combined biota/habitat assessments, combination benthic/fishes bioassessments, and habitat assessment (Figure 51). The pollutants impairing the aquatic life (CAH or WAH) designated use are copper, iron, lead, mercury, nutrient/eutrophication biological indicators, sedimentation/siltation, specific conductivity, and total dissolved solids (TDS) (Figure 51). The pollutants impairing the OSRW designated use are lead, nutrient/eutrophication biological indicators, and sedimentation/siltation (Figure 51).

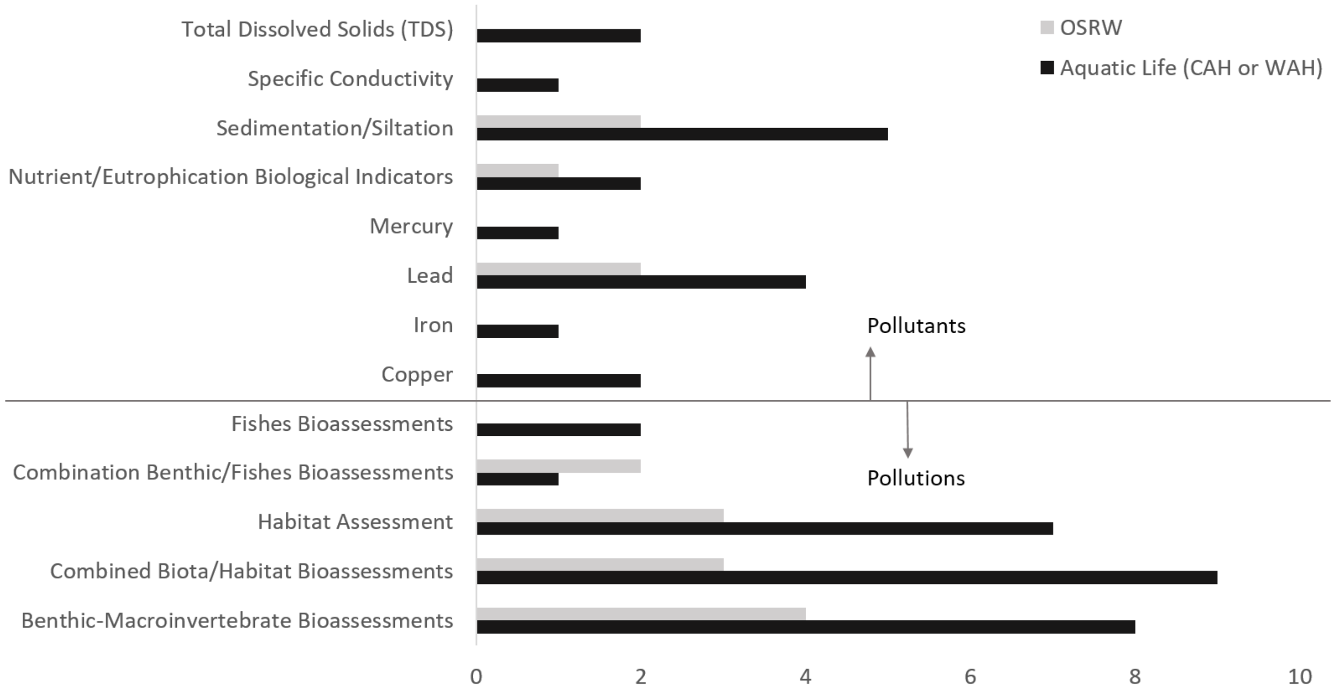


Figure 51. Number of impairments for the aquatic life (CAH or WAH) designated use by parameter where data collected by the probabilistic program from the Salt-Licking and Upper Cumberland and Four Rivers BMUs contributed to the attainment decision. Pollutants and pollutions are separated in figure, top to bottom.

Intensive Surveys

Intensive Surveys refers to programs within the Division that seek to have a better understanding of a particular waterbody, watershed, or region. This program typically collects monthly water chemistry for 1 to 3 years, bacteria during at least 1 recreation season, and biological community data. The following Intensive Surveys per program had their data used in this 2018/2020 IR cycle.

Success Monitoring:

- Hinkston Creek watershed, collected in 2014 and 2015
- Little Pitman Creek watershed, collected in 2016
- Martis Branch watershed, collected in 2016
- Pleasant Run watershed, collected in 2016
- North Fork Kentucky River Tributaries in Letcher County, collected in 2017 and 2018

TMDL:

- Claylick Creek watershed, data collected in 2013 and 2014
- Cypress Creek watershed, data collected 2016 - 2018
- Strodes Creek watershed, data collected in 2014 and 2015
- Damon Creek watershed, data collected in 2015

- Chestnut Creek watershed, data collected in 2016

Other Intensive Survey projects:

- Bluegrass Nutrient Study, data collected 2013 - 2015
- Marsh Creek watershed, data collected in 2013 and 2014
- Wild Rivers project, data collected 2013 – 2016

Below is a summary of the designated use attainment and causes of impairment where data collected as part of an intensive survey were used for assessment in this 2018/2020 IR. This program typically assesses previously unassessed waters, and often focuses in areas with known impairments where water quality improvement plans, such as TMDLs or watershed plans, have been developed or may be developed in the future. Therefore, the high proportion of impairment is expected, and these types of monitoring programs significantly contribute to Kentucky's 303(d) list each reporting cycle.

Aquatic Life (CAH or WAH)

Of the 165 assessment units where sampling completed by an intensive survey program contributed to an aquatic life (CAH or WAH) attainment decision, 30% were found to be full support, while 70% were found to be impaired (partial or nonsupport) (Figure 52).

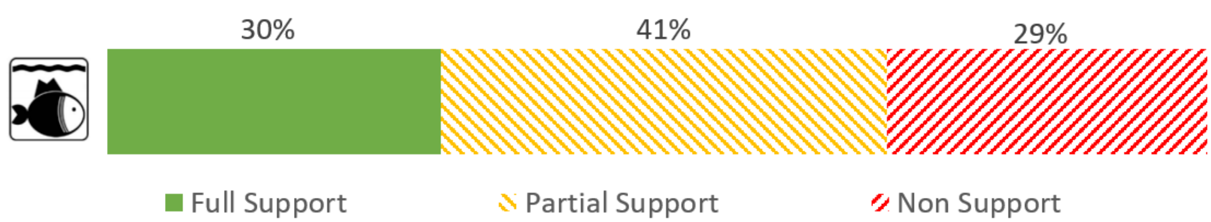


Figure 52. Proportion of attainment for rivers and streams assessed for the aquatic life (CAH or WAH) designated use where data collected as part of an intensive survey contributed to the attainment decision.

Looking at only the impaired segments where data collected as part of an intensive survey contributed to an attainment decision for aquatic life (CAH or WAH), there is a greater mix of pollutions and pollutants contributing to the impairments, and the type of pollutants are more varied when compared to other programs (Figure 53). This is expected from intensive survey programs, where the watersheds selected are monitored extensively for one to three years, and a variety of data types are collected. The pollutants contributing to more than 10 impairments are nutrient/eutrophication biological indicators, sedimentation/siltation, specific conductivity, iron, organic enrichment (sewage) biological indicators, and lead (Figure 53).

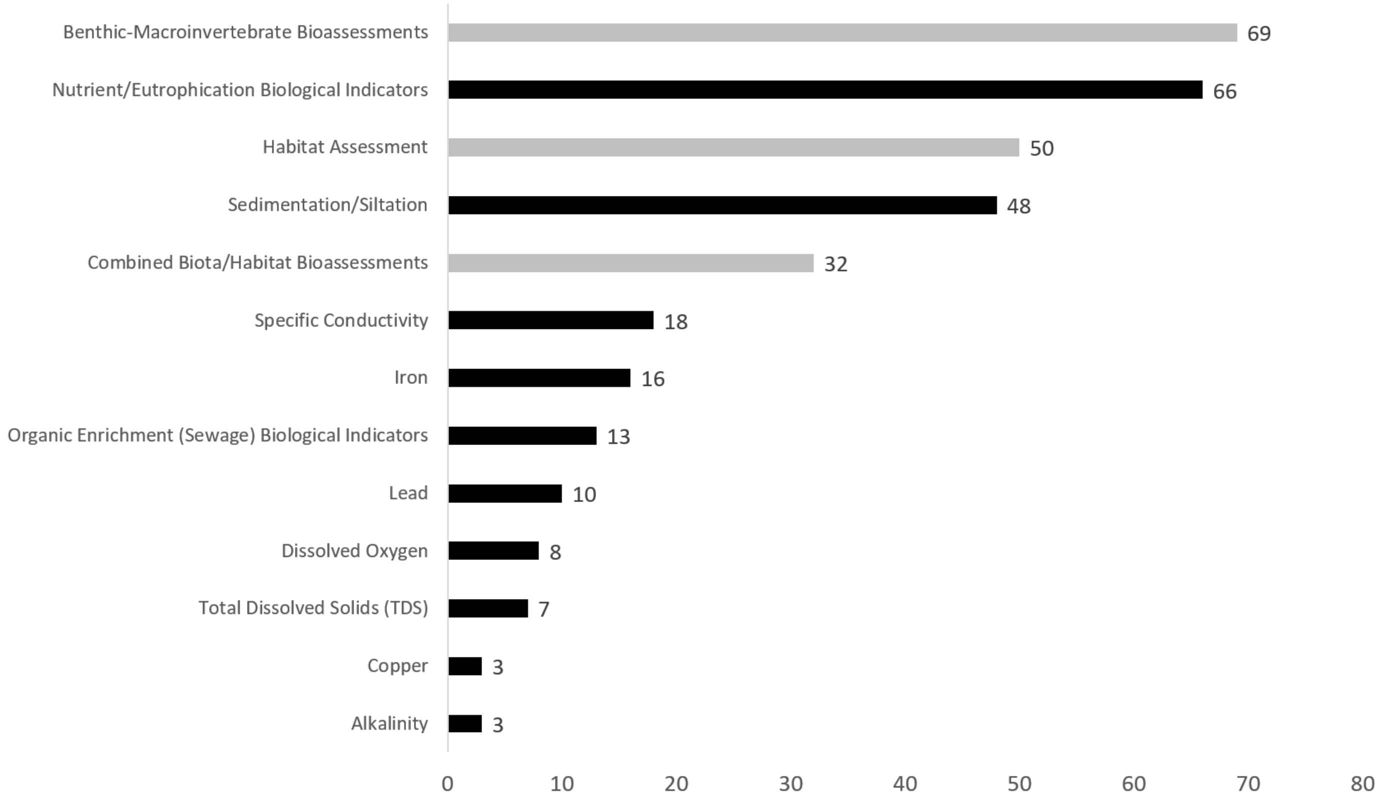


Figure 53. Number of impairments for the aquatic life (CAH or WAH) designated use by parameter where data collected as part of an intensive survey contributed to the attainment decision. Graph only shows those parameters that are identified as a cause of impairment in more than one (1) assessment unit. Pollutants in **black**; Pollutions in gray.

Primary Contact Recreation

Of the 81 assessment units where sampling completed by an intensive survey program contributed to a PCR attainment decision, 16% were found to be full support, while 84% were found to be impaired (partial or nonsupport) (Figure 54).

Figure 54. Proportion of attainment for rivers and streams assessed for the primary contact recreation designated use where data collected as part of an intensive survey contributed to the attainment decision.

Looking at only the impaired segments where data collected as part of an intensive survey contributed to an attainment decision for PCR during this cycle, all impairments are related to the pollutant *E. coli*.

Outside Agency Contribution

Data collected by outside agencies (such as USACE and USGS) contributed to the attainment decision for one or more designated uses along 67 assessment units. Data were used to assess the waterbody types rivers/streams and lakes/reservoirs. Below is a summary of the aquatic life use attainment and causes of impairment where data collected by an outside agency were used for assessment in this 2018/2020 IR.

Aquatic Life (CAH or WAH)

Of the 62 assessment units where sampling completed by an outside agency contributed to an aquatic life (CAH or WAH) attainment decision, 31% were found to be full support, while 69% were found to be impaired (partial or nonsupport). The parameters identified as a cause of impairment in more than one waterbody were benthic-macroinvertebrate bioassessments, habitat assessment, pH, and nutrient/eutrophication biological indicators.

Public Health

Harmful Algal Bloom Monitoring

Cyanobacteria are photosynthetic bacteria that live in all types of water in Kentucky and around the world. They are also known as blue-green algae because of their blue-green appearance, which is caused by the presence of the blue pigment, phycocyanin. During certain times of the year, cyanobacteria can be the dominant component of the algae community in a river or lake. Certain environmental conditions allow for the prolific reproduction of blue-green cells forming a "bloom." Most of the year, their presence causes minimal negative impact to water quality or human/animal health. However, when blue-green algal blooms form, water quality and human/animal health can be negatively impacted in several ways. Water quality is negatively impacted by the bloom causing discoloration of the water, drastic reductions and wide fluctuations in dissolved oxygen levels, increased turbidity, and decreased light penetration. Fish may be negatively affected by an overall reduction in food availability or when oxygen levels drop and become limited in lakes. Public recreation is negatively impacted by blooms because the nuisance scums and mats make swimming or wading in the water less desirable. In lakes that serve as sources of drinking water, blue-green algal blooms can cause taste and odor problems resulting in increased lake management (i.e. application of copper sulfate or other algaecide) and filtration costs. Additionally, blooms can clog filters at the intake structure, causing increased maintenance costs.

Although the above-mentioned impacts are important issues to consider when cyanobacteria blooms form, the most significant issue may be the presence of toxins produced by the cyanobacteria cells as the bloom is occurring and during the dying-off process. These blooms are known as harmful algal blooms (HABs) due to their potential impacts on public health. Cyanobacteria may cause skin irritation and flu-like symptoms from endotoxins located within the cell walls. Additionally, these taxa can produce liver and nerve toxins, called cyanotoxins. The most common of these cyanotoxins, microcystin, is a liver toxin that can cause illness or death in animals and humans. Over the past twenty years, more than a dozen complaints have been received by the Water Quality Branch (WQB) of the Kentucky DOW concerning deaths of pets or livestock as a result of drinking tainted water. (These blooms have always been associated with farm ponds where livestock had unlimited access to the pond.) Although not directly implicated in human death, exposure to cyanotoxins has been linked to liver disease, respiratory problems, and nervous system problems. Health risks from contact or ingestion exposure of cyanotoxins are increased for the elderly, young children, pregnant women, and persons with suppressed immune systems.

Although some HABs occur during the cold seasons, they most frequently occur during the late summer when temperatures are high, sunlight is ample, and water flow is low. In addition, one of the most influential factors of HAB growth is the concentration of nutrients such as nitrogen and phosphorus. Most nitrogen and phosphorus pollution (also known as nutrient overloading) comes from the runoff of fertilizers (lawns, agriculture, golf courses), untreated human sewage (storm overflows), and untreated animal sewage. Many lakes and reservoirs in Kentucky that are eutrophic (high nutrient/high algal production) are at elevated risk for having HABs.

The Division and the USACE began testing and documenting cyanobacteria in 2013 in 5 USACE reservoirs and 14 additional non-USACE reservoirs using cell counts (the number of cyanobacteria cells in a milliliter of water). Based on elevated cell counts in 2014, DOW and USACE identified the presence of potential HABs at Barren River Reservoir, Beaver Lake, Campbellsville City Reservoir, Carpenters Lake, General Butler State Park Reservoir, Green River Reservoir, Greenbrier Creek Reservoir, Guist Creek Lake, Lake Reba, Long Run Lake, McNeely Lake, Nolin Reservoir, Reformatory Lake, Rough River Reservoir, Taylorsville Reservoir, and Willisburg Lake.

In 2015, DOW began working with other agencies in the state to develop protocols for sampling and issuing HAB-related advisories based on microcystin and cylindrospermopsin toxin concentrations in recreational waters. Cyanotoxin concentrations are a more reliable indicator of potential health concerns than relying on cell counts alone, as the presence of cyanobacteria does not necessarily indicate that toxins are present also. For the 2015 recreation season, DOW and USACE revisited the reservoirs that had HAB recreational advisories in 2014 and collected samples for cyanotoxin testing during June-August of 2015. Most of the reservoirs had toxin levels that were below the laboratory detection limit at the time sampled. However, Herrington Lake and Lake Reba experienced microcystin toxin levels above 20 µg/L during the 2015 season. Additionally, the Ohio River had elevated toxin levels in multiple pools in the state in August-October 2015.

In 2016, three advisories were issued: a Future Farmers of America (FFA) Camp lake in Breckinridge Co., Briggs Lake in Logan Co., and Boltz Lake in Grant Co. The FFA Lake and Briggs Lake advisories were based on total microcystin concentrations above the warning and watch thresholds respectively. Boltz Lake had cylindrospermopsin concentrations over 500 µg/L. The advisory was the first cylindrospermopsin-based advisory in Kentucky. The advisories on Briggs and the FFA Lakes were lifted during 2016, but the advisory on Boltz Lake was not lifted until June 2017. There were no new advisories in 2017.

The DOW does not have the resources to routinely visit all public lakes across the state. The Division utilizes remote sensing, reports from the public or other agencies, and a new volunteer monitoring network initiated in 2017 to identify lakes with potential HABs. Once a possible HAB is identified, grab samples are collected if possible and sent to the lab for analysis. Results are reviewed to determine if a recreational advisory is warranted.

Advisories

HABS

Action levels for HAB watch and warning advisories are detailed in Table 9. Recreational advisories will be placed when the action limits in this table are exceeded. Action levels for total microcystins (all congeners) and cylindrospermopsin recommended by EPA were adopted by the Kentucky HAB Work Group in 2019. Action levels for anatoxin-a utilized by Ohio were adopted by the Kentucky HAB Work Group in 2019.

Table 9. Thresholds for advisories for total microcystins, cylindrospermopsin, and anatoxin-a.

Advisory Type	Cyanotoxin Thresholds (µg/L)			
	Total Microcystins	**Cylindrospermopsin**	**Anatoxin-a**	**HAB Viewer Color**
Recreational Public Health Advisory - Algal toxins present at unsafe levels. Swimming, wading, and water activities that create spray are not recommended.	8	15	80	Red

Current HAB advisories can be located using the Harmful Algal Bloom Viewer.

If you suspect that you have seen a HAB, please report the bloom to the Kentucky DOW by calling 502-564-3410 or emailing water@ky.gov. After hours and on weekends, you may contact the 24-hour hotline at 502-564-2380 or 1-800-928-2380. Blooms can also be reported using the BloomWatch app.

Fish Consumption

The Kentucky Departments for Environmental Protection, Public Health, and Fish and Wildlife Resources jointly issue fish consumption advisories to the public when fish are found with trace contaminants of mercury, PCBs, and chlordane.

These advisories caution citizens about potential health problems that may result from eating fish caught statewide as well as from a particular waterbody. These advisories do not ban eating fish; it is a guide to help citizens reduce risk and make informed decisions about eating fish from Kentucky waters. This guidance provides information on how often fish may be safely eaten. Most fish are healthy to eat and are an excellent source of low-fat protein.

Kentucky's fish consumption advisories

A multi-agency workgroup that consists of representatives from the main stem states, EPA and the Ohio River Valley Water Sanitation Commission (ORSANCO) establish advisories for the Ohio River.

Ohio River Fish Consumption Advisories

Swimming

The Kentucky DOW in the Energy and Environment Cabinet and the Division of Public Health Protection and Safety in the Cabinet for Health and Family Services agree that swimming advisories that have been in place for several years in different areas of the state because of high levels of E. coli bacteria should remain in effect until further notice.

People should avoid recreational contact with waters in the areas specified because of the bacteria, which occur in human and animal waste and indicate the presence of untreated or inadequately treated sewage. The bacteria create a potential for diarrheal illnesses and other infectious diseases.

Swimming advisories remain in effect for the following:

Upper Cumberland River

- The Cumberland River from Four Mile Bridge (Highway 2014) to Pineville at the Highway 66 Bridge and from Wallins Creek Bridge (Highway 219) to Harlan
- Martins Fork from Harlan to the Cawood Water Plant
- All of Catron Creek, all of Clover Fork and all of Straight Creek
- Poor Fork from Harlan to Looney Creek
- Looney Creek from the mouth to Lynch Water Plant Bridge

Kentucky River

North Fork of the Kentucky River upstream of Chavies. Although still above recommended levels, water quality has continued to improve and is approaching an acceptable level for swimming in some stretches of the river.

Licking River

Banklick Creek to the confluence with the Ohio River. The swimming advisory includes all of Banklick Creek and Three Mile Creek. Inadequate or failing sewage treatment systems can contribute to water quality problems along Kentucky waterways. Efforts by the Cabinet for Health and Family Services and local environmental health staff to ensure all new septic system installations are installed properly, and work by DOW and wastewater plant operators to monitor wastewater treatment plant compliance are reducing bacterial pollution from these possible sources. Work by both agencies is gradually reducing the number of discharges and improving water quality.

Residential and Agricultural Areas

The agencies also recommend against swimming or other full-body contact with surface waters immediately following heavy rainfall events, especially in dense residential, urban and livestock production areas. This recommendation is due to an increased potential for exposure to pollution from urban NPS pollution, bypasses from sewage collection systems, combined sewer overflows (CSO), and pollution from livestock waste. The public should avoid recreating in stream segments below wastewater treatment facility outfalls, confined animal feedlots or other obvious sources of pollution during any time of the year.

The agencies urge the public to use a common-sense approach to water recreation. Avoid areas with obvious green or brown surface scums or obvious foul odors. The cabinets want everyone to be safe and healthy while enjoying the Commonwealth’s water resources.

Planning, Protection, and Pollution Control

Total Maximum Daily Load Program

The TMDL program, established under [Section 303(d) of the CWA](), focuses on identifying and restoring polluted Kentucky waterbodies such as rivers, lakes and streams.

States must develop a TMDL calculation for each pollutant identified as a cause of impairment on 303(d) list. TMDL calculations are found in [TMDL reports](). A TMDL Report is a water quality restoration plan that describes how pollutant loads can be reduced to meet water quality standards.

Impaired Waters Restoration Process

The TMDL program coordinates with several other CWA programs such as permitting, monitoring and the 319 NPS Pollution Control Program to accomplish water quality restoration goals in Kentucky. TMDLs are an integral part of the Impaired Waters Restoration Process (Figure 55).

Figure 55. Schematic of impaired water restoration process.

Waterbodies identified as impaired by pollutants are placed on the 303(d) list in the 305(b)/303(d) IR. Once these waters are 303(d)-listed, water quality restoration planning can begin.

Kentucky is required to develop a TMDL calculation for each pollutant causing a waterbody to be placed on the 303(d) list. These calculations can be found in water quality restoration plans called TMDL reports. TMDL reports describe how pollutant loads can be reduced to meet water quality standards. TMDL implementation plans and watershed management plans can be incorporated into TMDL reports or prepared separately. Under some circumstances, other types of water quality restoration plans may be developed for waterbodies on the 303(d) list, in advance of TMDL development. These “alternative restoration approaches” (see next section) are most appropriate in cases where activities are planned or in progress that are expected to fully restore water quality in which case the water would be delisted and a TMDL not needed.

After the planning phase, facilitated by the TMDL, pollution control practices from the water quality restoration plan are implemented to reduce the amount of pollutants entering a waterbody. Discharge of pollutants can be limited by setting permit limits for point sources or implemented BMPs for non-point sources pollution.

Once the pollution control practices have had time to take effect, the impaired waterbodies will be monitored and tracked to determine if water quality is improving. An impaired waterbody is considered fully recovered or restored when water quality standards have been met and designated uses have been achieved. This generally occurs many years after a plan was put in place.

Alternative Restoration Plans

An alternative restoration plan is a near-term water quality restoration plan with a schedule of actions and milestones that are more immediately beneficial or practicable to achieving water quality standards than a TMDL.

Kentucky communities that take initiative to develop and implement water quality restoration plans to clean up impaired waters may successfully restore water quality to meeting standards, thereby removing the need and requirement for a TMDL. Alternative approaches are developed and carried out by the local community, which allows for flexibility in the water quality restoration process.

Alternative restoration plans are submitted to and accepted by the EPA. The impaired waters in an alternative restoration plan will remain in category 5 on the 303(d) list, but will typically be assigned a lower priority for TMDL development while the plan is underway. If water quality standards are not achieved by the plan, a TMDL is still required. Plan progress is reviewed regularly by DOW to ensure that the TMDL development priority should remain low.

The EPA-accepted alternative restoration plans for Kentucky may be downloaded from the table on the alternative approaches webpage. There is currently one EPA-accepted plan available but several more are in development with expected completion in 2022.

TMDL Program Priorities

Kentucky DOW is implementing the national CWA 303(d) Program Vision, which calls for states to prioritize impaired waters for TMDL development and to develop alternative restoration approaches where appropriate over a six-year period (2016-2022).

In 2011, the CWA 303(d) Program Vision was developed by the EPA and state TMDL program managers as means to improve the effectiveness of the TMDL program. The framework outlined in this program "vision" allows Kentucky to develop state specific priorities, encourages stakeholder engagement, and allows the TMDL section to integrate our work with other CWA program priorities. The vision fosters flexible watershed management but requires the support of many stakeholders – including public, federal, and state agencies – to attain this common goal.

In 2016, Kentucky DOW submitted its first draft of vision priorities to the EPA. The vision priorities list was updated in 2018 using the 2016 303(d) list. This vision priorities list consists of pollutant-waterbody combinations that are prioritized to have a TMDL or alternative restoration plan completed by 2022.

Kentucky DOW's top vision priority for TMDL development is to address all remaining bacteria impairments in the Commonwealth. Another vision priority includes working with stakeholders to develop alternative restoration approaches in communities with the on-the-ground resources to address water quality impairments more quickly than a TMDL approach. Kentucky's first EPA-accepted alternative restoration plan was possible with the cooperation of various stakeholders in the Gunpowder Creek Watershed.

As of this 2018/2020 Integrated Report, Kentucky has completed plans addressing 308 pollutant-waterbody combinations that are part of the vision priorities covering a watershed area of 1,333 square miles. This represents progress towards completion of 72% by pollutant-waterbody combinations (Figure 56) and 61% by watershed area for completing DOW's commitments for plans in place by the end of 2022. Remaining plans are in development and currently on track for completion before the 2022 Integrated Report. Note that a small percentage of plans (2% of the total pollutant-waterbody combinations that were identified as priorities) will not receive a plan in this effort for a variety of reasons, including some where new data showed that water quality is now meeting standards and the waterbody is slated for delisting.

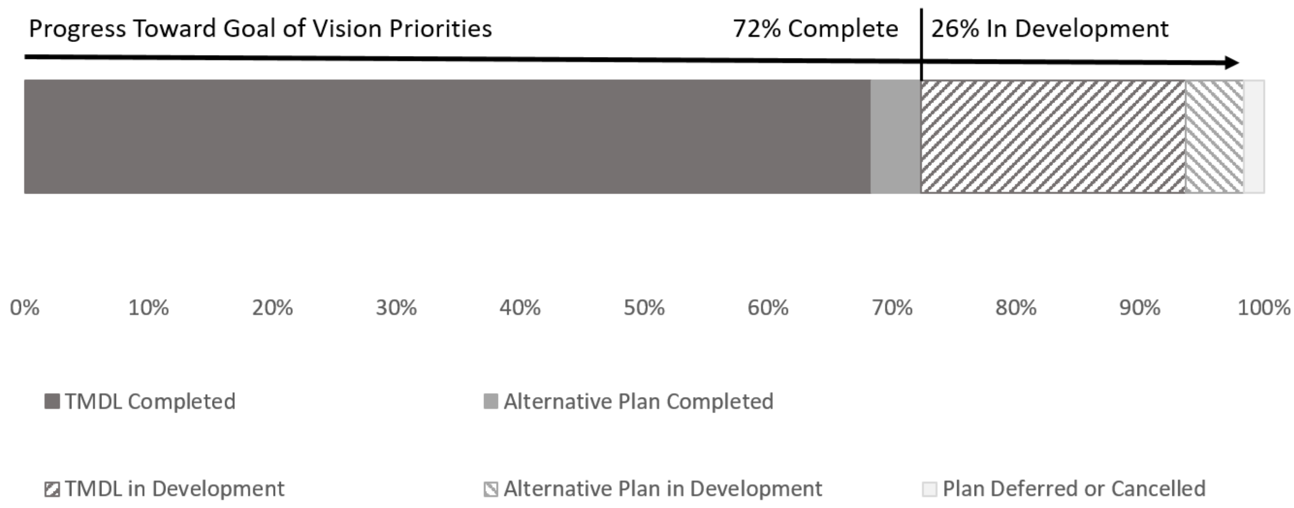


Figure 56. Progress toward completing vision priorities as of this 2018/2020 reporting cycle; the goal is to have all in development plans completed by the end of 2022, fulfilling DOW's vision priority commitments.

For additional information on the vision, read "Questions and Answers" on the Long-term Vision for Assessment, Restoration, and Protection under the Clean Water Act Section 303(d) Program.

If you have questions about the TMDL program, the vision, or alternative restoration approaches, email TMDL@ky.gov.

Nonpoint Source Program

The Kentucky Nonpoint Source Pollution Control Program (NPS Program) is authorized under Section 319 of the CWA amendments of 1987. The Section 319(h) Grant program was established to provide funding for efforts to reduce nonpoint source pollution. Each year DOW applies to EPA to receive 319(h) funding. Funds may be used to demonstrate innovative BMPs, support education and outreach programs, develop Watershed Based Plans, and to implement Watershed Based Plans.

The mission of the NPS Program is to protect the quality of Kentucky's surface and groundwater from known NPS pollution, to abate NPS threats, and to restore degraded waters to meet water quality standards. To support this vision, the NPS Program coordinates statewide efforts to minimize nutrient, sediment, and bacteria pollution through partnerships with federal, state, and local entities.

Effective NPS pollution reduction requires the participation of a variety of stakeholders and often leveraging the resources of multiple partnering agencies beyond DOW. The Kentucky NRCS selects NWQI watersheds for long-term investment in agriculture BMPs that improve water quality. DOW collaborated with the NRCS to identify Gunpowder Creek as a strong candidate for NWQI and assisted with implementation strategies, partnership opportunities and procurement of water quality data. The additional funding provided by NRCS supplemented ongoing watershed plan implementation and contributed to faster recovery in the basin. In addition, this collaboration helped Gunpowder Creek become Kentucky's first EPA-accepted alternative restoration plan. In 2020, the NPS Program worked with NRCS on Focused Conservation Projects, which seek to quantify water quality benefits of agricultural BMPs in watersheds across the state, while assisting with selection of new NWQI and Mississippi River Basin Initiative (MRBI) watersheds.

DOW also has a long-standing relationship with the state Division of Conservation (DOC), where coordinated investments in state soil and water cost-share practices help match federal funding for BMP implementation of NPS watershed plans. These collaborations help amplify individual programmatic objectives and broaden the impacts of dollars spent in the watershed. NPS Program staff are instrumental in facilitating these types of interagency projects, allowing stakeholders who share the goal of reducing NPS pollution to maximize their impact on water quality by working together.

Implementation

The state NRCS office and DOC regularly provide DOW with reports on water quality management practices implemented at the HUC-12 scale, which help track concerted public and private efforts that improve water quality (Figure 57).

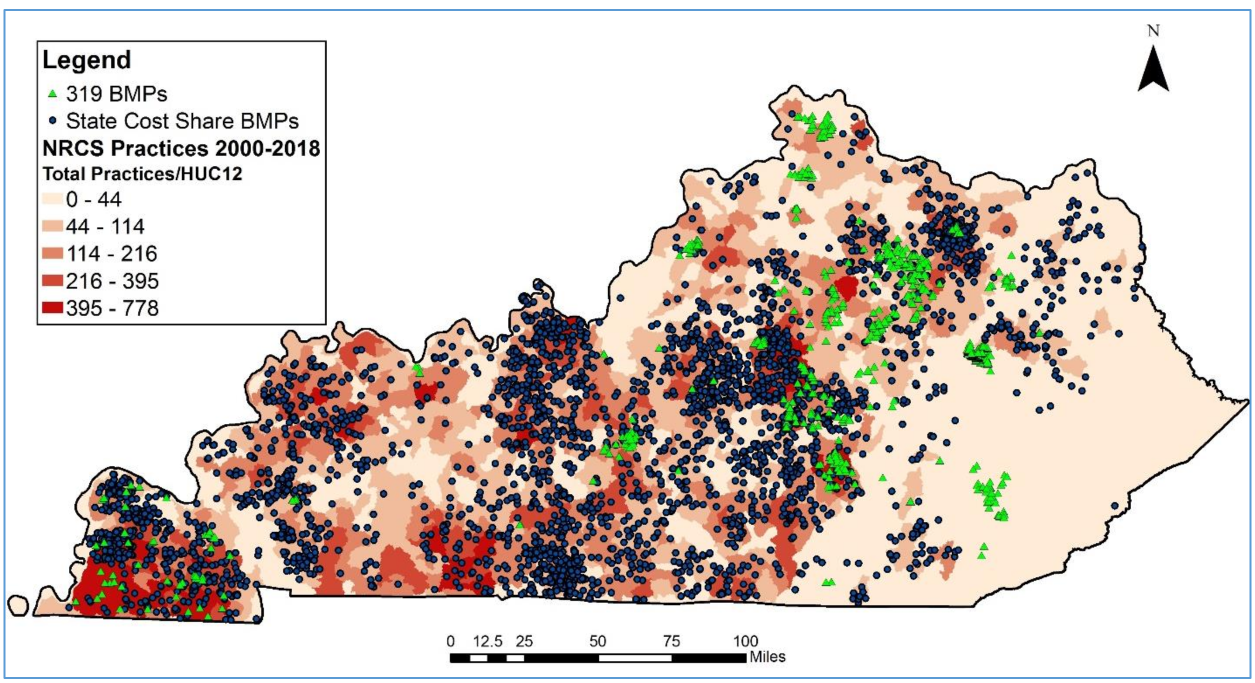


Figure 57. 319-Funded best management practices installed through 2018.

Through the state Agriculture Water Quality Act (AWQA) Authority, Kentucky made recent updates and refinements to BMPs in the State Water Quality Plan and continues to post stories from producers highlighting local implementation activities. DOW is working with DOC and the AWQA Authority to roll out an updated tool to assist farmers to protect water quality with farm-specific AWQA plans. This tool will incorporate updates to the State Water Quality Plan in a more user-friendly format to improve planning and BMP adoption.

Looking specifically at implementation activities that took place between September 2014 and September 2016 (the data collection period for this IR), over 35 types of BMPs were installed in more than 330 locations. DOW estimates these 319-funded BMPs reduced nutrient loading to waterways by 55,810 pounds per year of total nitrogen, 12,949 pounds per year of total phosphorus, and 9,567 tons per year of sediment between 2014 and 2016. The NPS Program Annual Reports provide regular updates on implementation of the NPS Management Plan.

Success Stories

DOW works with partners to track and monitor water quality where implemented BMPs are anticipated to reduce NPS pollution. Water quality improvements that result in a waterbody delisting in the biennial IR are reported as success stories to EPA. Due to the lag time between BMP installation and observable water quality improvement, each success story reflects NPS Program efforts many years prior to publication. For example, the NPS Program 2019 success story highlights BMPs installed from 2009-2013 and monitoring in 2013 that led to a 2016 delisting of Stoner Creek. Where the 2016 IR included the NPS success stories from 2013 and 2014, this combined 2018-2019 IR focuses on success stories from 2015-2019.

In 2015, DOW highlighted Eagle Creek as a 319 Program success story where septic system installations and upgrades, education and outreach activities and watershed planning reduced bacteria loading. As a result, Elk Creek was delisted in the 2010 IR. The full story is available on the EPA's NPS Program Success Story website.

In 2016, DOW identified Yellowbank Creek as a 319 Program success story where agricultural BMPs and pesticide education programs reduced pesticide, nutrient and sediment pollution. These actions improved stream quality to the point that Yellowbank Creek was delisted in the 2012 IR. The full story is available on the EPA's NPS Program Success Story website.

In 2017, DOW identified Bayou de Chien as a 319 Program success story where agricultural BMPs reduced bacteria loading and led to the stream delisting in the 2012 IR. The full story is available on the EPA's NPS Program Success Story website.

In 2018, DOW identified the Dix River as a 319 Program success story resulting from agricultural BMPs, septic system upgrades, and watershed planning that reduced bacteria loading. This work ultimately led to a stream delisting in the 2016 IR. The full story is available on the EPA's NPS Program Success Story website.

In 2019, DOW identified Stoner Creek as a 319 Program success story resulting from agricultural BMPs that reduced bacteria loads and led to the stream delisting in the 2016 IR. The full story is available on the EPA's NPS Program Success Story website.

Nutrient Reduction Strategy

DOW drafted the Nutrient Reduction Strategy (NRS) in 2014 to provide an initial strategy to address nutrient pollution. The 2019 Loads and Yields Study of watershed nutrients provides a core strategic metric for the NRS. Data collected between 2005-2017 from DOW's ambient rivers monitoring network and the USGS stream gauge network provides estimated loads (tons per year) and yields (tons per year per square mile) of total nitrogen and total phosphorus in Kentucky watersheds (see Figures 58 and 59). Kentucky's NRS prioritizes watershed planning and BMP funding in these high yield watersheds where agency resources, partners, and local capacity can deliver results.

In June of 2021, the Division updated its 2019 Loads and Yields Study that determines ongoing trends and evaluates progress in reducing Kentucky's nutrient load contribution to the Gulf of Mexico. This update uses new DOW data (2018-2019) and partner data from ORSANCO. Overlapping the two data sets expands coverage of Kentucky's drainage area from 76% to 82%, while identifying out-of-state nutrient contributions.

The DOW 2021 Update to the 2019 Nutrient Loads and Yields in Kentucky Study serves as a critical foundation for Kentucky's upcoming 2021 Nutrient Reduction Strategy (NRS) Update. The 2021 NRS Update prioritizes high yield watersheds in a data-driven approach to nutrient reduction in Kentucky. The DOW interactive Nutrient Reduction in Kentucky map improves nutrient data and decision-making transparency by allowing users to explore nutrient loads in local watersheds, review land use, and view watershed investments from the DOW and EPA 319 Non-Point Source Program.

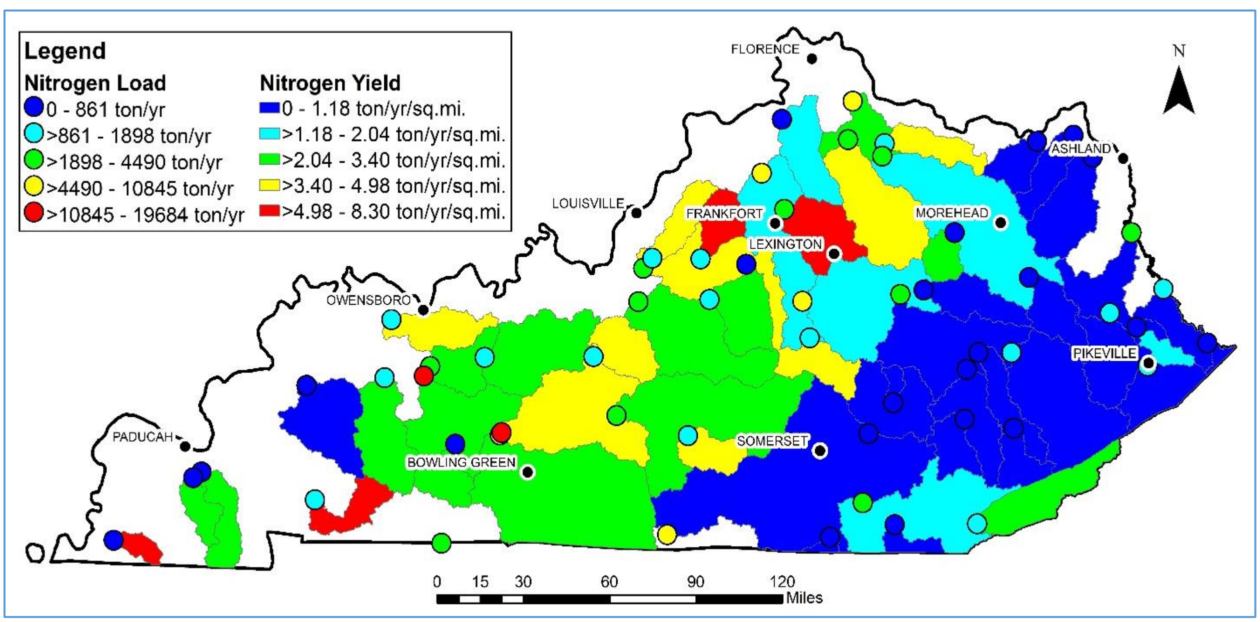


Figure 58. Total Nitrogen Loads and Yields, 2005-2017.

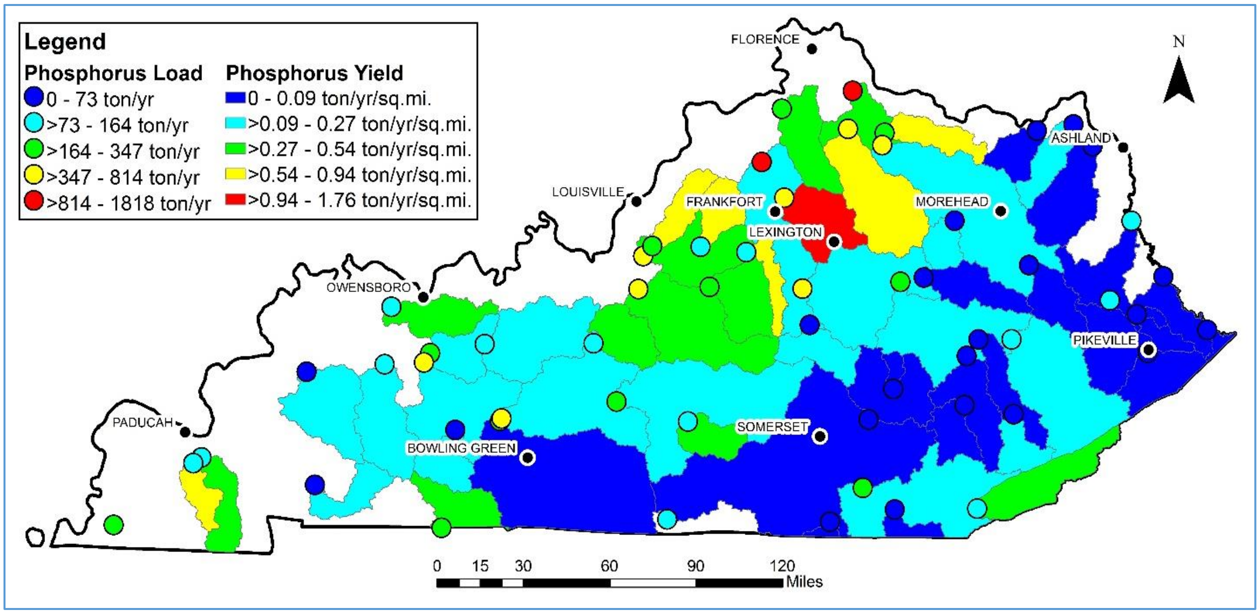


Figure 59. Total Phosphorus Loads and Yields, 2005-2017.

Water Pollution Control Program

There are four (4) Kentucky Communities under federal Consent Decrees and fifteen (15) Kentucky communities that are under state consent judgements to eliminate sanitary sewer overflows (SSO) and to repair systems to reduce CSOs. Communities implement projects to manage wastewater capacity and develop long-term control plans (LTCPs). The projects often include repairing sewer lines and increasing the storage capacity in the sewer system. Completion dates of these projects vary depending on the scope of work and financial considerations (Table 10).

There are 238 Kentucky communities that have varying degrees of aging infrastructure that cause bypasses and overflows at wastewater treatment plants. DOW personnel inspect approximately 7% (not including MS4 inspections or Pretreatment Inspections that are not related to the CSO/SSO aspects) of the systems in these communities, focusing on systems with frequent and recurring incidents and complaints. During inspections, DOW staff educate communities on identifying causes of overflows, prioritizing corrective actions, finding funding resources, and returning collection systems to compliance with the CWA.

Nutrients

Excess nutrients impede water quality by causing adverse effects on natural water chemistry and indigenous aquatic community. At a minimum, monitoring of the influent and effluent for total phosphorus and total nitrogen is included on Kentucky Pollutant Discharge Elimination System (KPDES) permits. The monitoring requirements for these parameters are consistent with the KPDES permit program requirements for establishing effluent limitations, standards, and permit conditions in accordance with numeric and narrative standards.

Table 10. Combined Sewer Overflows (CSO) and Sanitary Sewer Overflows (SSO) mitigation projects in Kentucky.

Community	Expected Completion Date
Ashland STP	12/31/2025
Catlettsburg STP	Completed, 1/31/2019
Frankfort Municipal STP	12/31/2023
Harlan STP	2020, but pending new date 12/31/2025
Henderson STP	Completed, 3/31/2015
LFUCG: Lexington Town Branch STP; Lexington West Hickman. Not CSOs	12/31/2026
Louisville MSD: Morris Forman WQTC	12/31/2024 but this will change with new dates when approved
Loyall STP	2020, but pending new date 12/27/2025
Maysville STP	2015, but pending new date June 2023
Morganfield WWTP	2018, but pending new date 12/31/2021
Northern KY SD1	12/31/2025
Owensboro RWRA: Max Rhoads WWTP	12/31/2026
Paducah/McCracken County JSA	12/31/2038
Pikeville WWTP was CSO	Completed, 07/01/2014
Pineville STP	2017, but pending new date 9/5/2022
Prestonsburg STP was CSO	Completed, 10/01/2015
Vanceburg STP was CSO	Completed, 12/31/2012
Winchester Municipal Utilities (not CSO)	12/31/2025
Worthington WWTP	12/31/2015

Cost/Benefit Analysis

A cost-benefit analysis is a process that is used to measure benefits of an action in comparison to the cost associated with that action. Even though both cost and water quality data are available, the benefits of improved water quality are challenging to quantify, as most impacts are non-monetary. Below is a summary of costs and benefits associated with both the Clean and Drinking Water State Revolving Fund (DWSRF) Program.

Costs: The Clean Water State Revolving Fund (CWSRF) and DWSRF are environmental programs implemented by the states with support from EPA. These programs address the costs associated with wastewater and drinking water, respectively.

The CWSRF program was created in 1988 to establish a water pollution control revolving fund that would provide financial assistance for construction of publicly owned treatment works under section 212 of the CWA, implementation of watershed management plans under section 319 of the CWA, and development and implementation of conservation and management plans under section 320 of the CWA. The funds are provided by EPA in the form of capitalization grants to all states annually. Every year Kentucky identifies water pollution control priorities and ranks infrastructure projects based on these priorities. These projects are funded through the CWSRF in the form of low interest loans. As of April 2020, Kentucky's CWSRF program has funded 544 clean water infrastructure projects, totaling more than $1.55 billion, since the inception of the program.

The DWSRF was created in 1996, to further the goals of the Safe Drinking Water Act (SDWA). Like the CWSRF, every year Kentucky identifies its drinking water priorities and ranks infrastructure projects based on these priorities. These projects are funded through the DWSRF in the form of low interest loans. Kentucky has funded 250 drinking water projects, totaling more than $460 million since the inception of the program. Table 11 lists the dollar amounts spent each year since the inception of both programs.

Table 11. Funds spent using the Clean Water State Revolving Fund and Drinking Water State Revolving Fund in Kentucky.

	Clean Water State Revolving Fund	Drinking Water State Revolving Fund
2007 and prior	$479,991,442	$98,011,339
2008	$250,499,329	$53,702,151
2009	$67,267,880	$6,519,566
2010	$82,000,089	$36,227,115
2011	$81,162,663	$20,791,942
2012	$99,156,727	$23,670,604
2013	$73,950,436	$46,847,854
2014	$21,816,396	$10,083,876
2015	$139,841,765	$39,181,612
2016	$40,389,815	$26,095,763
2017	$48,140,377	$21,963,652
2018	$37,543,203	$18,126,139
2019	$91,123,225	$27,275,882
2020	$37,466,003	$31,614,113
Since 2008	$1,070,357,908	$362,100,269
Cumulative	$1,550,349,350	$460,111,608

Benefits: Most of the benefits of wastewater and drinking water infrastructure take the form of improved water quality and public health, both of which are difficult to quantify. Since the inception of both programs, Kentucky has funded projects that address these beneficial goals. In the past two years (2018-2020), the CWSRF has funded the following projects:

- Replacement, upgrade, or expansion of at least eight old and dilapidated wastewater systems that were polluting the waterways across the Commonwealth of Kentucky.
- Thirteen projects that reduced inflow and infiltration; five projects that eliminated SSOs; and one project that eliminated a CSO. All these projects helped systems achieve compliance, resulting in improved water quality.
- Seven failing package treatment plants are in the process of being eliminated through regionalization. Two such package plants are polluting Cane Run, and the CWSRF provided essential funding to eliminate the source of pollution. Regionalization of these plants has resulted in the reduction of system operation costs.
- Several projects provided services to areas that were served by failing septic systems, thus reducing the nutrient and pollutant loading in the waters of the Commonwealth.

- Kentucky, like other states, has been facing algal blooms that have impacted the drinking water treatment plants and increased their costs. As projects funded through the state revolving fund reduce the amount of nutrients and pollutants in Kentucky's waterways, treatment plants will see a decline in operational costs.
- The funding through the state revolving fund is also being invested in new, green, energy-efficient technologies. This is increasing the long-term sustainability of Kentucky's water infrastructure.

Overall, these programs are geared towards improving the quality of Kentucky's natural resources, resulting in long-term benefits including diverse ecosystems, increased tourism, and economic development.

The following resources are provided for the reader interested in learning more about this topic.

- The economic benefits of protecting healthy watersheds (EPA 2012)
- Linking water quality and well-bring for improved assessment and valuation of ecosystem services (Keeler et al. 2012)
- A compilation of cost data associated with the impacts and control of nutrient pollution (EPA 2015)
- Healthy Watersheds Protection webpage (EPA 2021)
- Life Cycle and Cost Assessments of Nutrient Removal Technologies in Wastewater Treatment Plants (EPA 2021)

Program Enhancement

KATTS

The 2018/2020 IR cycle was the first cycle to use KATTS from the beginning to the end of the cycle process. Throughout the two years, bugs were found and fixed, enhancements were developed and implemented, and XML generation and submittal to EPA's ATTAINS occurred for the first time.

With the development of KATTS, the Kentucky DOW could, for the first time, query data related to programs, station-assessment unit relationships, and parameter groups. The Division could also accurately report on applicable designated uses at the assessment unit level, where some uses (e.g. CAH and OSRW) only apply to some waterbodies.

KATTS also stores the GIS data for each assessment unit. Therefore, REST services were used to develop websites with interactive maps to provide public notice of the 303(d) and to develop an ArcGIS Hub Site for this IR. These same services will be used to populate the Water Health Portal with Kentucky's 2018/2020 305(b) assessment results.

The Division continues to prioritize enhancements to KATTS as it moves toward future cycles. Enhancements to tracking of actions (e.g. TMDLs) and other water quality improvement programs are underway, while additional QAQC and role-specific tasks are planned for future work to reduce potential sources of error and improve further the quality of the data being managed, stored, and shared through the KATTS application.

Wetlands

The Wetland Monitoring and Assessment Program began in 2010, and the initial program goal was to develop an assessment method for rapidly determining wetland condition to inform permitting decisions. Since then, the program has expanded to include development of indices of biological integrity (IBIs), a Kentucky Wetland Rapid Assessment Method (KY-WRAM), and evaluation of Kentucky's Surface Water Criteria for wetlands. Currently, three IBIs have been developed for use in the Wetland Monitoring and Assessment Program. These include IBIs for vegetation (VIBI), avifauna (AIBI), and amphibians (AmphIBI). The VIBI and AIBI methods were completed in December 2017, and the AmphIBI was completed in November 2020.

Although there has been considerable progress made in creating these wetland assessment tools, further testing is needed before they can be fully implemented to assess designated use attainment, track trends, and assess the success of restoration and protection efforts. Once development and testing is complete, the tools will be used to assess and report on wetland condition statuses and trends. DOW anticipates that assessment of designated use attainment will be based on water chemistry, physicochemistry, rapid condition assessment, and biological community data. In addition, a significant priority of the Wetland Monitoring and Assessment Program is to collaborate with federal and state agencies, as well as private entities, to adopt the wetland assessment tools that have been developed. Through these collaborations, DOW strives to improve the regulatory decision-making process, and to support voluntary restoration and protection of wetland habitat.

Finally, DOW made substantial progress toward increasing the capacity to perform monitoring activities internally. For the majority of its existence, 2011-2019, the Monitoring and Assessment Program primarily contracted out data collection. Over the last two years, additional staffing resources have been allocated to the Monitoring and Assessment Program. This provided the resources needed for DOW to begin collecting water chemistry and *in situ* data in 2019, which will help lay the foundation for an ambient monitoring program and provide baseline data for evaluation of existing water quality standards for wetlands. In addition, for the first time since the program was created, DOW performed all of its wetland vegetation and avifauna surveys during the 2019 field season.

Visit these wetland resources for more information:

- Wetland Program Plan
- Wetland Story Map
- KY-WRAM
- Permits for Wetland Fill or Alteration
- National Wetland Condition Assessments

Public Participation

Public Notice

On June 4, 2021, DOW published the 2018/2020 draft 303(d) list of impaired waters requiring a TMDL for public comment, as required by KRS 224.70-150. New to this combined 2018/2020 reporting cycle was a dedicated public notice site for the public to view the draft 303(d) list, new listings, proposed delistings, waters with completed TMDLs, and the 305(b) list. Spreadsheets and interactive maps with video tutorials were available through the site. Links to assessment summaries and TMDL documents were available through the map dashboards or in the provided spreadsheets.

Notification was sent through a Commonwealth of Kentucky Energy and Environment Cabinet blog post. Additionally, the public notice was distributed electronically through the TMDL Listserv and NPS Listserv, which is a list of persons interested in TMDL and/or NPS-related issues. The official public notice announcement can be found in Appendix A.

Comments received and responses to comments are included in Appendix B.

Water Health Portal

To find information about any waterway in Kentucky, visit the Water Health Portal at http://watermaps.ky.gov/WaterHealthPortal/. Type in your location, click on a stream, and learn about the health of any assessed waterway. There are easily identifiable color-coded icons that indicate whether a stream or lake supports a particular use, such as swimming, fishing, and drinking.

Stay Informed / Get Involved

TMDL Information Distribution List

If you are interested in being kept up to date with public notice periods for future draft 303(d) lists or TMDL activities, please email TMDL@ky.gov to be added to the TMDL information distribution list.

Watershed Planning Webpage (basin coordinators)

You can also visit the Watershed Planning webpage to see what is going on in your basin. Each basin has a coordinator, and they are happy to help and answer any questions you may have.

Volunteer

Watershed Watch in Kentucky (WWKY) is a statewide citizens monitoring effort to improve and protect water quality by raising community awareness and by supporting implementation of the goals of the CWA and other water quality initiatives. They are always looking for new volunteers; visit the WWKY webpage to learn more.

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Appendices

Appendix A - Public Notice Announcement

Draft 2018/2020 303(d) List at Public Notice, June 4, 2021

The Kentucky Division of Water has opened a 60-day comment period on the draft 2018/2020 303(d) list of impaired waters as required by KRS 224.70-150. Comments received by email or mail must be dated or postmarked no later than August 3, 2021. Comments on the draft 303(d) list may be sent:

- Via email (*preferred method*) to: TMDL@ky.gov (Subject line: "303(d) List")
- Via U.S. Mail to: Water Quality Branch (ATTN: 303(d) List)
  Kentucky Division of Water
  300 Sower Blvd., 3rd Floor
  Frankfort, KY 40601

New to this combined 2018/2020 reporting cycle is a dedicated public notice site (https://2018-2020-303d-public-notice-kygis.hub.arcgis.com/) to view the draft 303(d) list, new listings, proposed delistings, waters with completed total maximum daily loads (TMDLs), and the 305(b) list. Spreadsheets and interactive maps with video tutorials are available through this site. Links to assessment summaries and TMDL documents are available through the map dashboards or in the provided spreadsheets.

Section 305(b) of the Clean Water Act (CWA) requires states to report to Congress every two years on the health of waters in the state, and whether the water quality of individual waterbodies is sufficient to support their designated uses. In Kentucky, these designated uses include primary contact recreation, secondary contact recreation, aquatic life, domestic water supply, fish consumption, and outstanding state resource waters. The determination of designated use attainment is based on water quality sampling and assessment methodologies developed by the state and approved by the U.S. Environmental Protection Agency (EPA).

Section 303(d) of the CWA requires states to identify impaired waters, the pollutant(s) causing the impairment, and to develop a TMDL for each of those pollutants. Section 303(d) also requires states to prioritize waters for TMDL development. The TMDL, which is a daily maximum allowance for a pollutant, supports plans and strategies for restoring water quality.

Monitoring that occurred to update assessments for the draft 2018/2020 305(b) and 303(d) lists was primarily from streams, rivers, and reservoirs in the Green and Tradewater Rivers Basin Management Unit (BMU), the Kentucky River BMU, and the Upper Cumberland and Four Rivers BMU. Monitoring also occurred outside of the BMUs of focus to provide statewide assessment updates. In total, 1,106 stations had data collected for assessment and 915 assessments were completed.

As a reference, assessment results from the 2016 Integrated Report can be accessed at the Kentucky Water Health Portal (https://watermaps.ky.gov/WaterHealthPortal/). Upon EPA approval of the 2018/2020 303(d) list, the Water Health Portal will be updated with the 2018/2020 305(b) assessment information.

Appendix B – Comments Received and Response to Comments

The purpose of this appendix is to document the public comments received and provide a response to these comments in writing. There were two submittals on the draft 2018/2020 303(d) list. Comments are reproduced as received in gray text below and DOW responses are in black text.

Dear Commenters,

Thank you for your participation in the public notice process by providing comments on the draft 2018/2020 303(d) list of impaired waters requiring a Total Maximum Daily Load (TMDL). The Kentucky Division of Water (DOW) continues to have interest in engaging the public in the assessment and listing process, as well as the prioritization of waterbodies for TMDL development. The Division encourages and welcomes public participation; if you are interested in engaging with the Division on these topics, please email TMDL@ky.gov.

Commenter 1

Westlake Vinyls, Inc. (Westlake) is submitting these comments based on our review of the Kentucky Division of Water's (KDOW's) Cypress Creek Total Maximum Daily Load (TMDL) Study Plan (effective date: 3/1/2016), sampling results and field notes from the field work, and the proposed 303(d) listing of Cypress Creek iron, lead, *E. coli*, dissolved oxygen (DO), nutrient/eutrophication biological indicators, sedimentation/siltation, and specific conductivity. The 303(d) listing indicates "industrial point source discharge" may be one of the sources for iron (previously listed), DO, and specific conductivity exceedances between 0 and 6.25 mile points along Cypress Creek.

General Comment and Statement

Westlake continues to have interest in the 303(d) listing process and subsequent TMDLs that will be developed. We continue to encourage KDOW to base the listings on sound scientific studies and quality data collection. We have provided comments and participated in meetings with KDOW over the last few years to understand both the process and possible outcomes for the Cypress Creek Study. The original listing was based on one sample collection with an analyzed exceedance for iron. An open records request led to the discovery that the information existed in a database but there was no documentation of the quality data.

According to KDOW's "Consolidated Assessment and Listing Methodology", "data older than five years should generally not be used to make a use support decision (U.S EPA 1997), unless it can be determined the data are still representative of current conditions" (p.40). The acute Iron result of 5.6 mg/L for one sample collected in 2006 was more than 5 years old when Cypress Creek was listed on the 303(d) list for iron impairment in 2014. No other provided results from 2000-2011 exceeded the acute water quality standard of 4 mg/L. This would indicate that the 2006 iron concentration used to list the stream is not "still representative of current conditions."

Except for one sediment sample on November 10, 2005, sampling data used for the stream impairment listing consists only of in-stream chemical data. The sediment sample contained 17,200 mg/kg by dry weight of iron, which is slightly below the mean iron value of 22,456 mg/kg for generic statewide ambient background for Kentucky (Kentucky Guidance for Ambient Background Assessment, 2004).

KDOW conducted a study of Cypress Creek from 2016 to 2018 over a period of 27 months. Selected locations were not all consistently sampled on a monthly basis during the study. Stream segment 0-6.25-mile points encompass the industrial area in which Westlake operates a stormwater outfall.

With the ubiquitous nature of iron and lead detected in the Cypress Creek watershed because of natural conditions, Westlake urges KDOW to assess the stream conditions and evaluate the listing under category 4c — segment does not support designated use(s), but this is not attributable to a pollutant or combination of pollutants.

DOW Response to General Comment and Statement

In accordance with 401 KAR 10:031 Surface Water Standards and the Kentucky DOW's Consolidated Assessment and Listing Methodology, designated use attainment has been determined by the Division where data of sufficient quality, quantity, and appropriate age were available. If a designated use has been determined to be impaired, the cause of impairment and suspected sources are identified.

The suspected sources used for the impaired waters list are provided by EPA and can be found at http://iaspub.epa.gov/pls/waters/f?p=ASKWATERS:SOURCE_LUT. The DOW uses suspected sources to best describe the observed conditions at each monitoring location and resulting assessment unit.

Iron was first listed as a cause of impairment on the 2008 303(d) list based on monthly data collected from 4/13/2005 to 3/15/2006. This impairment was passed forward to the 2010 303(d) list. New data were collected between 4/13/2010 to 3/28/2011, which confirmed the iron impairment, and updated the assessment during the 2012 cycle. No new data were available for this segment during the 2014 and 2016 cycles.

New data were available for the 2018/2020 cycle throughout the Cypress Creek watershed. Per 40 CFR § 130.7(b)(5), "Each State shall assemble and evaluate all existing and readily available water quality-related data and information to develop the list required by §§ 130.7(b)(1) and 130.7(b)(2)."

A rigorous quality assurance and quality control process was completed as outlined by Kentucky DOW's Quality Assurance Project Plan (QAPP), Standard Operating Procedures (SOP), and Consolidated Assessment and Listing Methodology (CALM). The data used for assessment within the Cypress Creek watershed were deemed appropriate, sufficient in both quality and quantity.

Per 40 CFR § 130.7(b)(6), "Each State shall provide documentation to the Regional Administrator to support the State's determination to list or not to list its waters as required by §§ 130.7(b)(1) and 130.7(b)(2)." Furthermore, per 40 CFR § 130.7(b)(6)(iv), "each State must demonstrate good cause for not including a water or waters on the list. Good cause includes, but is not limited to, more recent or accurate data; more sophisticated water quality modeling; flaws in the original analysis that led to the water being listed in the categories in § 130.7(b)(5); or changes in conditions, e.g., new control equipment, or elimination of discharges."

For the 2018/2020 reporting cycle, new data of sufficient quantity and quality were available to update the assessment for Cypress Creek 0.0 to 6.25. The *in situ*, water chemistry, and macroinvertebrate results continued to indicate warm water aquatic life impairment and exceedance of the iron criteria. Therefore, there is not good cause for removing this water from the 303(d) list.

When completing assessments within the Cypress Creek watershed, DOW reviewed potential sources of iron and lead and referenced EPA sources and guidelines. EPA's 2014 IR guidance states the following: "When a State evaluates whether a potential designated use impairment is the result of natural conditions, the State should consider all sources of the pollutant being evaluated. If the pollutant concentrations do not meet the EPA-approved water quality standards, and anthropogenic sources of the pollutant are present, the water is considered impaired and should be included on the State's Section 303(d) list even if natural sources of the pollutant are present."

Throughout the Cypress Creek watershed, the most recent data demonstrated that iron and lead do not meet water quality criteria along one or more assessment units, and potential anthropogenic sources are present. Sources of metals in waterbodies include, but are not limited to, municipal wastewater treatment effluent, industrial point sources, urban runoff, landfills, junkyards, and dredging (U.S. EPA 2021). Therefore, it is not appropriate to categorize these impairments as 4c due to natural conditions and they must instead be listed on the 303(d) list in category 5.

40 CFR § 130.7 requires waters on the 303(d) list be given a priority ranking. 40 CFR § 130.7 (b)(4) specifically states, "The list required under §§ 130.7(b)(1) and 130.7(b)(2) of this section shall include a priority ranking for all listed water quality-limited segments still requiring TMDLs."

As part of the 2018/2020 303(d) public notice, DOW provided definitions for TMDL priority rankings (Table 1). On the 2018/2020 303(d) list, impairments in the Cypress Creek watershed were given the following TMDL priority rankings by parameter:

- *E. coli* impairments have a priority rank of high
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Table 1. Definition of TMDL priority rankings on the 2018/2020 303(d) list.

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Specific Comments - Comment 1

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No chain-of-custody forms, laboratory analytical data reports, or other documentation were provided for field sampling performed in 2006, including the sampling event with a reported iron result of 5.6 mg/L, which was stated as the reason for listing Cypress Creek on the 303(d) list in 2014. No macroinvertebrate samples were provided by KDOW under our open records request for sampling between 2000 and 2011. Additionally, field observation forms appear to be limited to the 2010-2011 sampling years, with no field forms provided for prior years.

According to KDOW's "Consolidated Assessment and Listing Methodology", "data older than five years should generally not be used to make a use support decision (U.S EPA 1997), unless it can be determined the data are still representative of current conditions" (p.40). The acute Iron result of 5.6 mg/L for one sample collected in 2006 was more than 5 years old when Cypress Creek was listed on the 303(d) list for iron impairment in 2014. No other provided results from 2000-2011 were above the acute water quality standard for iron of 4 mg/L to indicate that this sample was "still representative of current conditions."

Therefore, Westlake requests the original listing for iron at mile points 0-6.2 along Cypress Creek be removed.

DOW Response to Comment 1

Iron was first listed as a cause of impairment on the 2008 303(d) list based on monthly data collected from 4/13/2005 to 3/15/2006. This impairment was passed forward to the 2010 303(d) list. New data were collected between 4/13/2010 to 3/28/2011, which confirmed the iron impairment, and updated the assessment during the 2012 cycle. No new data were available for this segment during the 2014 and 2016 cycles.

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Specific Comments - Comment 2

KDOW's Cypress Creek TMDL Study Plan states that "three years of data are required to list for metals" with the first year of sampling focused on "confirming the nature of the impairments and possible sources of those impairments." "The second and third years of sampling may also include data collection in smaller, un-assessed tributaries that may be contributing to the identified impairment" (p. 3). In the first year (2016), KDOW sampled sites 1-9. KDOW then dropped Sites 2, 3, 7, and 9 and added Sites 10, 11, and 12 in 2017. Sites 11 and 12 represent "smaller, un-assessed tributaries" feeding into Site 9, and Site 10 is at an upper reach of the same stream represented by Site 9. It appears the additional sites (10-12) are intended to further evaluate these "un-assessed tributaries" as identified in the TMDL Study Plan.

Samples were collected between March 2016 and May 2018, which is 27 months total. Out of the 27-month study, samples were only collected during 16 events. However, the most any one site was sampled was 12 months at Site 2, and only 10 of those 12 months were consecutive.

Since KDOW has not followed its own TMDL Study Plan by collecting 3 years' worth of data, the current proposed listings for Cypress Creek and its tributaries based on the TMDL Study results should be withdrawn until a complete and full study is conducted.

DOW Response to Comment 2

Monitoring project study plans are intended to outline project goals and objectives, but they are not the guiding documents for completing assessments. Kentucky's Water Quality Standards (401 KAR 10:031) and Consolidated Assessment and Listing Methodology (CALM) define the criteria and methodologies for assessment and listing. The CALM notes that "[e]ven a short period of record can indicate a high confidence of impairment based on [physical/chemical] data; 3 years of data are not required to demonstrate impairment" (p. 72).

A rigorous quality assurance and quality control process was completed as outlined by Kentucky DOW's Quality Assurance Project Plan (QAPP), Standard Operating Procedures (SOP), and Consolidated Assessment and Listing Methodology (CALM). The data used for assessment within the Cypress Creek watershed were deemed appropriate, sufficient in both quality and quantity.

Specific Comments - Comment 3

Watershed management and watershed studies should be inclusive of all sources and reasons for chronic or acute exceedances. Iron and most likely lead in this watershed are naturally occurring based on data collected and references sited. Therefore, chronic exceedances are common along the entire sampled watershed with acute exceedances occurring frequently at Site 9 and Site 10 where the stream has been incised and straightened.

The greater Cypress Creek watershed encompasses primarily 5 iron-rich geologic units according to the Kentucky Geological Survey (KGS). These units include loess deposits, continental deposits, Clayton and McNairy Formation, alluvium, and lacustrine and fluvial deposits within the Breinsburg, Calvert City, Elva, and Little Cypress quadrangles. Loess deposits in the Calvert City quadrangle can locally contain iron oxide concretions. Continental deposits in the Breinsburg, Elva, and Little Cypress quadrangles contain layers cemented with ferruginous material. The Clayton and McNairy formation can be cemented by ferruginous material and contain iron oxide concretions. Alluvium deposits are cemented by iron oxide in the Breinsburg quadrangle and contain sparse to abundant iron oxide concretions in the soil zone of the Calvert City quadrangle. Lacustrine and fluvial deposits along waterways in the Calvert City quadrangle contain abundant iron oxide "buckshot" concretions in the soil zone.

Iron oxide (ferruginous) cementation and iron oxide concretions present in formations within the watershed provide sources of naturally occurring iron that can be dissolved into surface water or be a part of sediment loading. The streambed of Cypress Creek is predominately incised within lacustrine and fluvial deposits, including the area upstream of sites 9 & 10, where significant channelization and erosion are present and 66% of acute iron exceedances occurred. This erosion causes increased exposure to the abundant iron oxide concretions present in the formation.

Additionally, KDOW field notes indicate that multiple stream segments consistently do not flow or are dry during portions of the year. KDOW field notes also indicate evidence of flooding at multiple sites indicating a large variation in stream flow that would not only affect the viability of macroinvertebrate populations in these streams but also dissolved oxygen and specific conductivity.

Were these facts taken into consideration when listing parameters and potential sources? If the current stream conditions dictated by precipitation and geology show impacts, how does KDOW attribute that to industrial activities?

DOW Response to Comment 3

The DOW considered a variety of factors when completing assessments in the Cypress Creek watershed.

- DOW reviewed potential sources of iron and referenced EPA sources and guidelines. The DOW agrees with the commenters that channelization can contribute additional iron, and that these anthropogenic disturbances to the channel are not natural.
- DOW also considered the impact of low or variable stream flow on parameters such as benthic macroinvertebrates, dissolved oxygen, and specific conductivity.
- Generally, excursions of water quality criteria were not limited to a particular hydrologic condition. Potential sources of the pollutant are present and those potential sources are located along and/or upstream of the sampling location and the resulting assessment unit's watershed.
- DOW was not targeting any specific sources but meeting a 303(d) listing responsibility to identify potential sources based on the information available. To be inclusive of all sources and reasons for chronic or acute exceedances was beyond the scope of the study.
- Based on comments received, DOW has replaced occurrences of the source "Industrial Point Source Discharge" with "Industrial/Commercial Site Stormwater Discharge (Permitted)" in the watershed.

The data used for assessment were deemed appropriate, sufficient in both quality and quantity. DOW has an obligation under the Clean Water Act sections 305(b) and 303(d) to 1) assess whether the water quality of individual waterbodies is sufficient to support its designated uses, 2) identify impaired waters, and 3) identify causes of impairment and suspected sources.

Specific Comments - Comment 4

Previously dissolved oxygen was listed on the 305(b) list for Cypress Creek. It is now proposed to be listed under 303(d) with a TMDL. What is the reason for moving the parameter to the 303(d) list?

Additionally, Dissolved oxygen exceedances in the KDOW data were dissolved oxygen concentrations < 4.0 mg/L. Based on review of KDOW data the dissolved oxygen instrument was not always calibrated properly and documented. The dissolved oxygen data used to make decisions should be reviewed again for quality assurance and quality control. Were dissolved oxygen measurements reviewed to ensure proper calibration?

DOW Response to Comment 4

Dissolved oxygen saturation (as percent) and dissolved oxygen (as concentration) are different parameters. Dissolved oxygen as a parameter has numeric water quality criteria for the warm water aquatic habitat designated use ("instantaneous minimum shall not be less than four and zero-tenths (4.0) mg/L in water with WAH use.").

Dissolved oxygen saturation was first identified as an impaired parameter for the Cypress Creek 0.0 to 6.25 assessment unit on the 2008 305(b), where the assessor listed the parameter under category 4c. Dissolved oxygen saturation has been identified as an impaired parameter for this assessment unit for all cycles since the 2008 cycle, either by being confirmed with new data or being carried forward.

The most recent data considered for assessment demonstrated that dissolved oxygen (concentration) is a more appropriate parameter because the numeric water quality criteria were not met (data collected by the Ambient Rivers program and the TMDL program supported this listing). Therefore, dissolved oxygen saturation was removed as a parameter (category 4c parameters do not require a delisting request), and dissolved oxygen was added as a cause of impairment. Low dissolved oxygen is a parameter that requires a TMDL, and since a TMDL has not been developed for this parameter, it is in category 5 and can be found on the 2018/2020 303(d) list.

Meter calibration and documentation were reviewed as part of the quality assurance process outlined in the Quality Assurance Project Plan (QAPP). Field sheets, data reports, and meter calibration were reviewed before assessment and listing. In the rare circumstances that the meter was not calibrated properly or the calibration was not documented, the field measurements were not used for assessment purposes.

Specific Comments - Comment 5

Copper appears to have exceeded chronic values in the UT of Cypress Creek 0.0-2.75 (AU # KY3274). In reviewing the data collected by KDOW, it was noted that hardness values for this segment of water is appreciably lower than the rest of Cypress Creek watershed. Did KDOW ascertain the reason for the lower hardness values used to calculate copper?

DOW Response to Comment 5

The lower hardness at this location was noted by staff, which prompted an additional review of the quality assurance/quality control samples associated with this assessment unit. Hardness was consistently low across sampling events, and no anomalies were observed. DOW concluded that the sample results accurately represent the hardness at this location and were therefore appropriate for use in evaluating the data against the copper criteria. DOW was not able to ascertain why this waterbody had lower hardness, which is a question outside the scope of the assessment.

Specific Comments - Comment 6

Specific Conductivity is listed for Cypress Creek 0.0-6.25 and the UT of Cypress Creek 0.1-1.3 (AU #KY-3275). Were these measurements taken in flowing water or stagnant water conditions? Specific conductivity is measured in the field, how does total dissolved solids (TDS) analyses compare to the field measurements? The conductive ions measured come from dissolved salts and inorganic materials such as alkalis, chlorides, sulfides and carbonate compounds. What particular ions (pollutants) are contributing to the higher specific conductivity?

DOW Response to Comment 6

Specific conductivity measurements were taken over a variety of flow conditions. A definitive determination of the particular ions contributing to the elevated conductivity is beyond the scope of the assessment process. According to 401 KAR 10:031, conductivity “shall not be changed to the extent that the indigenous aquatic community is adversely affected.”

DOW did examine accompanying results, including the ratio of TDS to specific conductivity and lab determined specific conductivity results, when available. The data used for assessment were deemed appropriate, sufficient in both quality and quantity.

- For UT of Cypress Creek 0.1 to 1.3 (AU # KY-3275), specific conductivity ranged from 529-2820 µS/cm, and sulfate was elevated above concentrations found in other streams in the watershed. This site is located near a staging area for coal before it is transported on barges along the Tennessee River; the waterbody or substrate was noted to be black with coal dust.
- For Cypress Creek 0.0 to 6.2 (AU # KY-617) elevated specific conductivity was limited to base flow to low flow conditions and ranged from 428 to 802 µS/cm during those conditions. This assessment unit is located below the confluence with the UT of Cypress Creek 0.1 to 1.3 where specific conductivity was more consistently and highly elevated. As a comparison, the assessment unit Cypress Creek 6.25 to 7.8, which is upstream of the confluence with the UT of Cypress Creek 0.1 to 1.3, ranged from 121 to 398 µS/cm.

Westlake appreciates the opportunity to provide these comments and looks forward to KDOW's responses.

Commenter 2

The Calvert City Environmental Consortium (the Consortium) is comprised of individuals and organizations that represent the regulated community in the Calvert City, KY area. The Consortium includes representatives from Arkema, Inc.; Ashland, Inc.; Calvert City Metals and Alloys; Carbide Industries LLC; City of Calvert City; Cymetech Corporation; Estron Chemical, Inc.; Evonik Corporation; Ingevity; Lubrizol Advanced Materials, Inc.; Phoenix Paper Wickliffe LLC; Sekisui SC; Vanderbilt Chemicals, LLC; Wacker Chemical Corporation; Waste Path Sanitary Landfill; and Westlake Vinyls, Inc.

The Consortium's comments are based on our review of the Kentucky Division of Water's (KDOW's) Cypress Creek Total Maximum Daily Load (TMDL) Study Plan (effective date: 3/1/2016), sampling results and field notes from the field work, and the proposed 303(d) listing of Cypress Creek iron, lead, *E. coli*, dissolved oxygen (DO), nutrient/eutrophication biological indicators, sedimentation/siltation, and specific conductivity. The 303(d) listing indicates "industrial point source discharge" may be one of the sources for iron (previously listed), DO, and specific conductivity exceedances between 0 and 6.25 mile points along Cypress Creek.

General Comment and Statement

The Consortium continues to have interest in the 303(d) listing process and subsequent TMDLs that will be developed. We continue to encourage KDOW to base the listings on sound scientific studies and quality data collection. We have provided comments and participated in meetings with KDOW over the last few years to understand both the process and possible outcomes for the Cypress Creek Study. The original listing was based on one sample collection with an analyzed exceedance for iron. An open records request led to the discovery that the information existed in a database but there was no documentation of the quality data.

According to KDOW's "Consolidated Assessment and Listing Methodology", "data older than five years should generally not be used to make a use support decision (U.S EPA 1997), unless it can be determined the data are still representative of current conditions" (p.40). The acute Iron result of 5.6 mg/L for one sample collected in 2006 was more than 5 years old when Cypress Creek was listed on the 303(d) list for iron impairment in 2014. No other provided results from 2000-2011 exceeded the acute water quality standard of 4 mg/L. This would indicate that the 2006 iron concentration used to list the stream is not "still representative of current conditions."

Except for one sediment sample on November 10, 2005, sampling data used for the stream impairment listing consists only of in-stream chemical data. The sediment sample contained 17,200 mg/kg by dry weight of iron, which is slightly below the mean iron value of 22,456 mg/kg for generic statewide ambient background for Kentucky (Kentucky Guidance for Ambient Background Assessment, 2004).

KDOW conducted a study of Cypress Creek from 2016 to 2018 over a period of 27 months. Selected locations were not all consistently sampled on a monthly basis during the study. Stream segment 0-6.25-mile points encompass the industrial areas that the Consortium members operate. Note that only stormwater outfalls are located along Cypress Creek. No industrial outfalls are present.

With the ubiquitous nature of iron and lead detected in the Cypress Creek watershed because of natural conditions, the Consortium urges KDOW to assess the stream conditions and evaluate the listing under category 4c — segment does not support designated use(s), but this is not attributable to a pollutant or combination of pollutants.

DOW Response to General Comment and Statement

In accordance with 401 KAR 10:031 Surface Water Standards and the Kentucky DOW's Consolidated Assessment and Listing Methodology, designated use attainment has been determined by the Division where data of sufficient quality, quantity, and appropriate age were available. If a designated use has been determined to be impaired, the cause of impairment and suspected sources are identified.

The suspected sources used for the impaired waters list are provided by EPA and can be found at http://iaspub.epa.gov/pls/waters/f?p=ASKWATERS:SOURCE_LUT. The DOW uses suspected sources to best describe the observed conditions at each monitoring location and resulting assessment unit. As for a lack of industrial point source discharges in the watershed; comment noted and all occurrences of the source "Industrial Point Source Discharge" have been replaced with "Industrial/Commercial Site Stormwater Discharge (Permitted)."

Iron was first listed as a cause of impairment on the 2008 303(d) list based on monthly data collected from 4/13/2005 to 3/15/2006. This impairment was passed forward to the 2010 303(d) list. New data were collected between 4/13/2010 to 3/28/2011, which confirmed the iron impairment, and updated the assessment during the 2012 cycle. No new data were available for this segment during the 2014 and 2016 cycles.

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Since KDOW has not followed its own TMDL Study Plan by collecting 3 years' worth of data, the current proposed listings for Cypress Creek and its tributaries based on the TMDL Study results should be withdrawn until a complete and full study is conducted.

DOW Response to Comment 2

Monitoring project study plans are intended to outline project goals and objectives, but they are not the guiding documents for completing assessments. Kentucky's Water Quality Standards (401 KAR 10:031) and Consolidated Assessment and Listing Methodology (CALM) define the criteria and methodologies for assessment and listing. The CALM notes that "[e]ven a short period of record can indicate a high confidence of impairment based on [physical/chemical] data; 3 years of data are not required to demonstrate impairment" (p. 72).

A rigorous quality assurance and quality control process was completed as outlined by Kentucky DOW's Quality Assurance Project Plan (QAPP), Standard Operating Procedures (SOP), and Consolidated Assessment and Listing Methodology (CALM). The data used for assessment within the Cypress Creek watershed were deemed appropriate, sufficient in both quality and quantity.

Specific Comments - Comment 3

Watershed management and watershed studies should be inclusive of all sources and reasons for chronic or acute exceedances. Iron and most likely lead in this watershed are naturally occurring based on data collected and references sited. Therefore, chronic exceedances are common along the entire sampled watershed with acute exceedances occurring frequently at Site 9 and Site 10 where the stream has been incised and straightened.

The greater Cypress Creek watershed encompasses primarily 5 iron-rich geologic units according to the Kentucky Geological Survey (KGS). These units include loess deposits, continental deposits, Clayton and McNairy Formation, alluvium, and lacustrine and fluvial deposits within the Breinsburg, Calvert City, Elva, and Little Cypress quadrangles. Loess deposits in the Calvert City quadrangle can locally contain iron oxide concretions. Continental deposits in the Breinsburg, Elva, and Little Cypress quadrangles contain layers cemented with ferruginous material. The Clayton and McNairy formation can be cemented by ferruginous material and contain iron oxide concretions. Alluvium deposits are cemented by iron oxide in the Breinsburg quadrangle and contain sparse to abundant iron oxide concretions in the soil zone of the Calvert City quadrangle. Lacustrine and fluvial deposits along waterways in the Calvert City quadrangle contain abundant iron oxide "buckshot" concretions in the soil zone.

Iron oxide (ferruginous) cementation and iron oxide concretions present in formations within the watershed provide sources of naturally occurring iron that can be dissolved into surface water or be a part of sediment loading. The streambed of Cypress Creek is predominately incised within lacustrine and fluvial deposits, including the area upstream of sites 9 & 10, where significant channelization and erosion are present and 66% of acute iron exceedances occurred. This erosion causes increased exposure to the abundant iron oxide concretions present in the formation.

Additionally, KDOW field notes indicate that multiple stream segments consistently do not flow or are dry during portions of the year. KDOW field notes also indicate evidence of flooding at multiple sites indicating a large variation in stream flow that would not only affect the viability of macroinvertebrate populations in these streams but also dissolved oxygen and specific conductivity.

Were these facts taken into consideration when listing parameters and potential sources? If the current stream conditions dictated by precipitation and geology show impacts, how does KDOW attribute that to industrial activities?

DOW Response to Comment 3

The DOW considered a variety of factors when completing assessments in the Cypress Creek watershed.

- DOW reviewed potential sources of iron and referenced EPA sources and guidelines. The DOW agrees with the commenters that channelization can contribute additional iron, and that these anthropogenic disturbances to the channel are not natural.
- DOW also considered the impact of low or variable stream flow on parameters such as benthic macroinvertebrates, dissolved oxygen, and specific conductivity.
- Generally, excursions of water quality criteria were not limited to a particular hydrologic condition. Potential sources of the pollutant are present and those potential sources are located along and/or upstream of the sampling location and the resulting assessment unit's watershed.
- DOW was not targeting any specific sources but meeting a 303(d) listing responsibility to identify potential sources based on the information available. To be inclusive of all sources and reasons for chronic or acute exceedances was beyond the scope of the study.
- Based on comments received, DOW has replaced occurrences of the source "Industrial Point Source Discharge" with "Industrial/Commercial Site Stormwater Discharge (Permitted)" in the watershed.

The data used for assessment were deemed appropriate, sufficient in both quality and quantity. DOW has an obligation under the Clean Water Act sections 305(b) and 303(d) to 1) assess whether the water quality of individual waterbodies is sufficient to support its designated uses, 2) identify impaired waters, and 3) identify causes of impairment and suspected sources.

Specific Comments - Comment 4

Previously dissolved oxygen was listed on the 305(b) list for Cypress Creek. It is now proposed to be listed under 303(d) with a TMDL. What is the reason for moving the parameter to the 303(d) list?

Additionally, Dissolved oxygen exceedances in the KDOW data were dissolved oxygen concentrations < 4.0 mg/L. Based on review of KDOW data the dissolved oxygen instrument was not always calibrated properly and documented. The dissolved oxygen data used to make decisions should be reviewed again for quality assurance and quality control. Were dissolved oxygen measurements reviewed to ensure proper calibration?

DOW Response to Comment 4

Dissolved oxygen saturation (as percent) and dissolved oxygen (as concentration) are different parameters. Dissolved oxygen as a parameter has numeric water quality criteria for the warm water aquatic habitat designated use ("instantaneous minimum shall not be less than four and zero-tenths (4.0) mg/L in water with WAH use.").

Dissolved oxygen saturation was first identified as an impaired parameter for the Cypress Creek 0.0 to 6.25 assessment unit on the 2008 305(b), where the assessor listed the parameter under category 4c. Dissolved oxygen saturation has been identified as an impaired parameter for this assessment unit for all cycles since the 2008 cycle, either by being confirmed with new data or being carried forward.

The most recent data considered for assessment demonstrated that dissolved oxygen (concentration) is a more appropriate parameter because the numeric water quality criteria were not met (data collected by the Ambient Rivers program and the TMDL program supported this listing). Therefore, dissolved oxygen saturation was removed as a parameter (category 4c parameters do not require a delisting request), and dissolved oxygen was added as a cause of impairment. Low dissolved oxygen is a parameter that requires a TMDL, and since a TMDL has not been developed for this parameter, it is in category 5 and can be found on the 2018/2020 303(d) list.

Meter calibration and documentation were reviewed as part of the quality assurance process outlined in the Quality Assurance Project Plan (QAPP). Field sheets, data reports, and meter calibration were reviewed before assessment and listing. In the rare circumstances that the meter was not calibrated properly or the calibration was not documented, the field measurements were not used for assessment purposes.

Specific Comments - Comment 5

Copper appears to have exceeded chronic values in the UT of Cypress Creek 0.0-2.75 (AU # KY3274). In reviewing the data collected by KDOW, it was noted that hardness values for this segment of water is appreciably lower than the rest of Cypress Creek watershed. Did KDOW ascertain the reason for the lower hardness values used to calculate copper?

DOW Response to Comment 5

The lower hardness at this location was noted by staff, which prompted an additional review of the quality assurance/quality control samples associated with this assessment unit. Hardness was consistently low across sampling events, and no anomalies were observed. DOW concluded that the sample results accurately represent the hardness at this location and were therefore appropriate for use in evaluating the data against the copper criteria. DOW was not able to ascertain why this waterbody had lower hardness, which is a question outside the scope of the assessment.

Specific Comments - Comment 6

Specific Conductivity is listed for Cypress Creek 0.0-6.25 and the UT of Cypress Creek 0.1-1.3 (AU # KY3275). Were these measurements taken in flowing water or stagnant water conditions? Specific conductivity is measured in the field, how does total dissolved solids (TDS) analyses compare to the field measurements? The conductive ions measured come from dissolved salts and inorganic materials such as alkalis, chlorides, sulfides and carbonate compounds. What particular ions (pollutants) are contributing to the higher specific conductivity?

DOW Response to Comment 6

Specific conductivity measurements were taken over a variety of flow conditions. A definitive determination of the particular ions contributing to the elevated conductivity is beyond the scope of the assessment process. According to 401 KAR 10:031, conductivity “shall not be changed to the extent that the indigenous aquatic community is adversely affected.”

DOW did examine accompanying results, including the ratio of TDS to specific conductivity and lab determined specific conductivity results, when available. The data used for assessment were deemed appropriate, sufficient in both quality and quantity.

- For UT of Cypress Creek 0.1 to 1.3 (AU # KY-3275), specific conductivity ranged from 529-2820 µS/cm, and sulfate was elevated above concentrations found in other streams in the watershed. This site is located near a staging area for coal before it is transported on barges along the Tennessee River; the waterbody or substrate was noted to be black with coal dust.
- For Cypress Creek 0.0 to 6.2 (AU # KY-617) elevated specific conductivity was limited to base flow to low flow conditions and ranged from 428 to 802 µS/cm during those conditions. This assessment unit is located below the confluence with the UT of Cypress Creek 0.1 to 1.3 where specific conductivity was more consistently and highly elevated. As a comparison, the assessment unit Cypress Creek 6.25 to 7.8, which is upstream of the confluence with the UT of Cypress Creek 0.1 to 1.3, ranged from 121 to 398 µS/cm.

The Consortium appreciates the opportunity to provide these comments and looks forward to continued participation in the 303(d) proposed listing process.

AU_ID	ID_2016	MODIFICATION_TYPE	PARENT_AU_ID	PARENT_ID_2016	AU_NAME	AU_DESCRIPTION	WATERBODY_TYPE	WATERBODYID	AU_SIZE	SIZE_UNITS	LASTASSESSEDCYCLE	AU_CATEGORY	BASIN	COUNTY	RIVERMILELOWER	RIVERMILEUPPER	LOWERLATITUDE	LOWERLONGITUDE	UPPERLATITUDE	UPPERLONGITUDE	CYCLE
KY-176	KY486462_02	Rename			Bat East Creek 3.4 to 7.5	Carters Creek to Headwaters	River/Stream	486462	4.10	MILES	2016	2	Green River	Muhlenberg	3.40	7.50	37.13296	-87.11312	37.08450	-87.12217	2020
KY-178	KY486462-6.1_01	Rename			Bat East Creek UT 0.0 to 1.9	Mouth to Headwaters	River/Stream	486462	1.90	MILES	2016	5	Green River	Muhlenberg	0.00	1.90	37.10397	-87.11944	37.10140	-87.15084	2020
KY-177	KY486462-1.6_01	Rename			Bat East Creek UT 0.0 to 3.6	Mouth to Headwaters	River/Stream	486462	3.60	MILES	2016	5	Green River	Muhlenberg	0.00	3.60	37.15239	-87.09560	37.13141	-87.05462	2020
KY-179	KY486477_01	Rename			Baughman Creek 0.0 to 4.65	Mouth to Headwaters	River/Stream	486477	4.65	MILES	2008	4A	Kentucky River	Lincoln, Casey	0.00	4.65	37.47093	-84.82075	37.51884	-84.86484	2020
KY-180	KY486477-0.65_01	Rename			Baughman Creek UT 0.0 to 1.3	Mouth to Headwaters	River/Stream	486477	1.30	MILES	2016	4A	Kentucky River	Lincoln	0.00	1.30	37.47810	-84.82600	37.49646	-84.82228	2020
KY-181	KY486478_01	Rename			Baughman Fork 0.0 to 2.7	Mouth to UT	River/Stream	486478	2.70	MILES	2000	4A	Kentucky River	Fayette	0.00	2.70	37.93967	-84.33775	37.96665	-84.35905	2020
KY-182	KY486478_02	Rename			Baughman Fork 3.4 to 5.9	North Cleveland Road to UT	River/Stream	486478	2.50	MILES	2000	2	Kentucky River	Fayette	3.40	5.90	37.97327	-84.36565	37.98480	-84.38757	2020
KY-183	KY486478-2.8_01	Rename			Baughman Fork UT 0.0 to 1.5	Mouth to Bluesky WWTP (now inactive)	River/Stream	486478	1.50	MILES	2004	4A	Kentucky River	Fayette	0.00	1.50	37.96706	-84.36040	37.96578	-84.38646	2020
KY-187	KY486491_01	Rename			Bayou Creek 0.0 to 12.6	Backwaters of Ohio River to Headwaters	River/Stream	486491	12.60	MILES	2020	5	Ohio River	McCracken	0.00	12.60	37.17141	-88.79876	37.06382	-88.85358	2020
KY-2073	KY510435_01	Rename			Bayou Creek 0.0 to 19.1	Mouth to Whippoorwill Creek	River/Stream	510435	19.10	MILES	2004	5	Ohio River	Livingston	0.00	19.10	37.24443	-88.48339	37.26927	-88.39319	2020
KY-184	KY486489_01	Rename			Bayou de Chien 0.0 to 4.2	Mouth to Little Mud Creek	River/Stream	486489	4.20	MILES	2010	5	Mississippi River	Fulton	0.00	4.20	36.57688	-89.19208	36.58741	-89.13608	2020
KY-2857		Split	KY-185	KY486489_02	Bayou de Chien 13.3 to 14.3	Midway Between KY-239 and US-51 Bridges to Cane Creek (Fulton STP)	River/Stream	486489	1.00	MILES	2020	5	Mississippi River	Hickman	13.30	14.30	36.62284	-88.99961	36.62393	-88.98208	2020
KY-186	KY486489_03	Rename			Bayou de Chien 14.3 to 26.05	Cane Creek (Fulton STP) to South Fork of Bayou de Chien	River/Stream	486489	11.75	MILES	2020	4A	Mississippi River	Hickman, Graves	14.30	26.05	36.62391	-88.98243	36.58094	-88.80311	2020
KY-2816					Bayou de Chien 26.1 to 31.1	South Fork of Bayou de Chien to Headwaters	River/Stream	486489	5.00	MILES	2020	3	Mississippi River	Graves	26.10	31.10	36.58094	-88.80311	36.56193	-88.72512	2020
KY-2858		Split	KY-185	KY486489_02	Bayou de Chien 8.8 to 13.3	Rush Creek to Midway Between KY-239 and US-51 Bridges	River/Stream	486489	4.50	MILES	2020	5	Mississippi River	Hickman, Fulton	8.80	13.30	36.60437	-89.07437	36.62284	-88.99961	2020
KY-188	KY486497_01	Rename			Bays Fork 6.3 to 15.6	Sulphur Creek to West Fork of Bays Creek	River/Stream	486497	9.30	MILES	2008	5	Green River	Allen	6.30	15.60	36.87307	-86.26323	36.81211	-86.24042	2020
KY-189	KY486507_01	Rename			Beals Run 0.0 to 1.9	Mouth to UT	River/Stream	486507	1.90	MILES	2006	5	Kentucky River	Woodford	0.00	1.90	38.18536	-84.74288	38.16068	-84.74445	2020
KY-190	KY486519_01	Rename			Bear Branch 0.3 to 1.2	Mouth to headwaters	River/Stream	486519	0.90	MILES	2010	2	Kentucky River	Perry	0.30	1.20	37.13248	-83.10152	37.12604	-83.11334	2020
KY-198	KY486557_01	Rename			Bear Creek 0.0 to 2.0	Mouth to Left Fork Bear Creek	River/Stream	486557	2.00	MILES	2020	4A	Big Sandy River	Lawrence	0.00	2.00	38.24334	-82.60853	38.24884	-82.63496	2020
KY-191	KY486551_01	Rename			Bear Creek 0.0 to 2.8	Mouth to Oil Fork	River/Stream	486551	2.80	MILES	2008	2	Upper Cumberland River	Cumberland	0.00	2.80	36.75450	-85.35440	36.75711	-85.32558	2020
KY-2074	KY510462_01	Rename			Bear Creek 0.0 to 3.3	Mouth to KY/TN State Line	River/Stream	510462	3.30	MILES	2016	1	Upper Cumberland River	McCreary	0.00	3.30	36.62693	-84.53366	36.59661	-84.52090	2020
KY-192	KY486552_01	Rename			Bear Creek 0.6 to 1.6	1 mile default to Symsonia POTW	River/Stream	486552	1.00	MILES	2002	3	Tennessee River	Graves	0.60	1.60	36.91139	-88.54333	36.90983	-88.52617	2020
KY-195	KY486554_02	Rename			Bear Creek 14.65 to 22.4	Sunfish Creek to Claylick Branch	River/Stream	486554	7.75	MILES	2004	5	Green River	Edmonson	14.65	22.40	37.32555	-86.33692	37.26759	-86.35930	2020
KY-3187					Bear Creek 2.8 to 7.5	Oil Fork to Land Use Change	River/Stream	486551	4.70	MILES	2020	4C	Upper Cumberland River	Cumberland	2.80	7.50	36.75711	-85.32558	36.78000	-85.25508	2020
KY-196	KY486554_03	Rename			Bear Creek 29.15 to 33.4	Above Mouth of White Oak Branch to Mouth of Hart Branch	River/Stream	486554	4.25	MILES	2014	5	Green River	Grayson	29.15	33.40	37.35950	-86.30652	37.37573	-86.28648	2020
KY-193	KY486553_02	Rename			Bear Creek 3.4 to 6.7	Backwaters to Headwaters	River/Stream	486553	3.30	MILES	2020	5	Tennessee River	Marshall	3.40	6.70	36.87285	-88.22132	36.84562	-88.25930	2020
KY-197	KY486554_04	Rename			Bear Creek 40.25 to 42.7	Helm Fork to Lizard Branch	River/Stream	486554	2.45	MILES	2014	5	Green River	Grayson	40.25	42.70	37.43833	-86.25420	37.45964	-86.22389	2020
KY-194	KY486554_01	Rename			Bear Creek 8.05 to 12.75	Caney Hollow to Beaverdam Creek	River/Stream	486554	4.70	MILES	2020	5	Green River	Edmonson	8.05	12.75	37.21841	-86.37965	37.25444	-86.35123	2020
KY-199	KY486575_01	Rename			Bear Run 1.6 to 1.9	UT to Utility Right of Way Crossing	River/Stream	486575	0.30	MILES	2004	5	Ohio River	Breckinridge	1.60	1.90	37.77500	-86.50177	37.77839	-86.50012	2020
KY-200	KY486584_01	Rename			Beargrass Creek 0.3 to 1.7	Ohio River Backwaters to Middle and South Forks	River/Stream	486584	1.40	MILES	2010	5	Ohio River	Jefferson	0.30	1.70	38.26585	-85.72080	38.25250	-85.72721	2020
KY-204	KY486611_01	Rename			Beaver Creek 0.0 to 20.85	Mouth to UT	River/Stream	486611	20.85	MILES	2002	2	Salt River	Nelson, Anderson, Washington	0.00	20.85	37.88975	-85.15117	37.95637	-85.02716	2020
KY-203	KY486610_01	Rename			Beaver Creek 0.0 to 7.15	Mouth to Confluence of Left Fork Beaver Creek and Right Fork Beaver Creek	River/Stream	486610	7.15	MILES	2016	5	Big Sandy River	Floyd	0.00	7.15	37.61406	-82.72986	37.55917	-82.75228	2020
KY-3044		Split	KY-202	KY486609_02	Beaver Creek 15.8 to 21.55	Railroad Trestle to Glasgow Water Co/Plant B	River/Stream	486609	5.75	MILES	2020	2	Green River	Barren	15.80	21.55	37.02793	-85.96969	37.03139	-85.91111	2020
KY-2076	KY510488_01	Rename			Beaver Creek 16.65 to 16.95	Lake Backwaters to Elk Spring Creek	River/Stream	510488	0.30	MILES	2012	5	Upper Cumberland River	Wayne	16.65	16.95	36.82055	-84.88086	36.81681	-84.88019	2020
KY-2077	KY510488_02	Rename			Beaver Creek 16.95 to 34.9	Elk Spring Creek to Headwaters	River/Stream	510488	17.95	MILES	2012	5	Upper Cumberland River	Wayne	16.95	34.90	36.81681	-84.88019	36.67854	-84.83027	2020
KY-2075	KY510487_01	Rename			Beaver Creek 2.25 to 7.2	Lake Cumberland Backwaters to confluence of Freeman and Middle Forks	River/Stream	510487	4.95	MILES	2012	2	Upper Cumberland River	McCreary	2.25	7.20	36.92930	-84.41513	36.89500	-84.44078	2020
KY-3046		Split	KY-202	KY486609_02	Beaver Creek 21.55 to 22.55	Glasgow Water Co/Plant B to 1 mile upstream	River/Stream	486609	1.00	MILES	2020	2	Green River	Barren	21.55	22.55	37.03139	-85.91111	37.03345	-85.89752	2020
KY-3045		Split	KY-202	KY486609_02	Beaver Creek 22.55 to 28.1	1 Mile upstream of Glasgow Water Co/Plant B to Barren Fork	River/Stream	486609	5.55	MILES	2020	2	Green River	Barren	22.55	28.10	37.03345	-85.89752	37.03231	-85.84061	2020
KY-205	KY486612_01	Rename			Beaver Creek 7.5 to 15.4	Brushy Fork to Little Beaver Creek	River/Stream	486612	7.90	MILES	2006	2	Licking River	Harrison	7.50	15.40	38.46491	-84.19678	38.42065	-84.14821	2020
KY-201	KY486609_01	Rename			Beaver Creek 8.55 to 15.8	South Fork of Beaver Creek to Railroad trestle	River/Stream	486609	7.25	MILES	2020	5	Green River	Barren	8.55	15.80	36.98173	-85.98087	37.02793	-85.96969	2020
KY-2078	KY510489_01	Rename			Beaver Creek 9.0 to 15.15	Richardson Branch to Sewage Disposal	River/Stream	510489	6.15	MILES	2002	5	Licking River	Menifee	9.00	15.15	37.98428	-83.55277	37.95201	-83.62534	2020
KY-58	KY2785226_01	Rename			Beaver Creek UT 0.0 to 1.0	Mouth to Headwaters	River/Stream	510489	1.00	MILES	2012	2	Licking River	Menifee	0.00	1.00	37.99072	-83.50843	38.00207	-83.51714	2020
KY-206	KY486624_00	Rename			Beaver Lake	Entire Reservoir	Lake/Reservoir	486624	162	ACRES	2020	5	Salt River	Anderson			37.96198	-85.02249	37.97607	-85.00831	2020
KY-207	KY486628_01	Rename			Beaverdam Creek 0.0 to 14.55	Mouth to Headwaters	River/Stream	486628	14.55	MILES	2014	2	Green River	Edmonson	0.00	14.55	37.19672	-86.27606	37.11382	-86.15829	2020
KY-208	KY486628-13.6_01	Rename			Beaverdam Creek UT 0.0 to 1.3	Mouth to Headwaters	River/Stream	486628	1.30	MILES	2008	2	Green River	Edmonson	0.00	1.30	37.11598	-86.17557	37.11944	-86.15882	2020
KY-2079	KY510492_01	Rename			Becks Creek 0.0 to 4.0	Mouth to Headwaters	River/Stream	510492	4.00	MILES	1998	5	Upper Cumberland River	Whitley	0.00	4.00	36.74509	-84.25301	36.72430	-84.20984	2020
KY-209	KY486666_01	Rename			Bee Creek 0.0 to 0.7	Mouth to Murray WWTP	River/Stream	486666	0.70	MILES	2012	5	Tennessee River	Calloway	0.00	0.70	36.63396	-88.28613	36.63056	-88.29292	2020
KY-210	KY486666_02	Rename			Bee Creek 0.7 to 2.0	Murray WWTP to UT (Draining Urban Area)	River/Stream	486666	1.30	MILES	2008	4A	Tennessee River	Calloway	0.70	2.00	36.63056	-88.29292	36.62815	-88.31374	2020
KY-212	KY486678_01	Rename			Bee Lick Creek 0.0 to 5.7	Mouth to Warren Branch	River/Stream	485669	5.70	MILES	2020	5	Upper Cumberland River	Pulaski	0.00	5.70	37.26772	-84.43760	37.30223	-84.49337	2020
KY-213	KY486678_02	Rename			Bee Lick Creek 7.4 to 10.8	UT to Headwaters	River/Stream	485669	3.40	MILES	2006	5	Upper Cumberland River	Rockcastle, Lincoln	7.40	10.80	37.32203	-84.49481	37.35850	-84.50255	2020
KY-214	KY486697_01	Rename			Beech Creek 0.0 to 3.9	Mouth to Headwaters	River/Stream	486697	3.90	MILES	2016	5	Green River	Muhlenberg	0.00	3.90	37.18357	-87.10341	37.17724	-87.03968	2020
KY-215	KY486700_01	Rename			Beech Creek 3.15 to 18.4	Taylorsville Lake Backwaters to Little Beech Creek	River/Stream	486700	15.25	MILES	2020	4A	Salt River	Shelby, Spencer	3.15	18.40	38.04164	-85.25536	38.09267	-85.17379	2020
KY-216	KY486703_01	Rename			Beech Fork 0.0 to 12.05	Mouth to Long Run	River/Stream	486703	12.05	MILES	2006	2	Salt River	Nelson	0.00	12.05	37.76236	-85.69968	37.73679	-85.54666	2020
KY-2081	KY510517_01	Rename			Beech Fork 0.0 to 4.0	Mouth to Headwaters	River/Stream	510517	4.00	MILES	2016	5	Kentucky River	Perry	0.00	4.00	37.06793	-83.12213	37.08139	-83.17133	2020
KY-2080	KY510516_01	Rename			Beech Fork 0.0 to 8.3	Mouth to Big Branch	River/Stream	510516	8.30	MILES	2000	2	Kentucky River	Leslie	0.00	8.30	37.04426	-83.40224	36.95665	-83.39662	2020
KY-221	KY486704_01	Rename			Beech Fork 0.05 to 3.35	Backwater from Clover Creek to UT with Lake	River/Stream	486704	3.30	MILES	2008	2	Ohio River	Breckinridge	0.05	3.35	37.80068	-86.57215	37.77597	-86.57415	2020
KY-220	KY486703_05	Rename			Beech Fork 109.7 to 111.8	Hot Water Creek to Headwaters	River/Stream	486703	2.10	MILES	2006	2	Salt River	Marion, Boyle	109.70	111.80	37.59785	-85.04111	37.62187	-85.02638	2020
KY-2903					Beech Fork 21.25 to 22.25	Bardstown Municipal Water Works to 1 mile Upstream	River/Stream	486703	1.00	MILES	2020	3	Salt River	Nelson	21.25	22.25	37.79509	-85.47860	37.78236	-85.47580	2020
KY-217	KY486703_02	Rename			Beech Fork 39.5 to 50.4	Cartwright Creek to Chaplin River	River/Stream	486703	10.90	MILES	2020	5	Salt River	Nelson, Washington	39.50	50.40	37.75898	-85.35030	37.84379	-85.27846	2020
KY-218	KY486703_03	Rename			Beech Fork 50.4 to 57.3	Chaplin River to Long Lick Creek	River/Stream	486703	6.90	MILES	2000	2	Salt River	Washington	50.40	57.30	37.84379	-85.27846	37.81886	-85.24362	2020
KY-3047		Split	KY-219	KY486703_04	Beech Fork 57.3 to 76.1	Long Lick Creek to Springfield Water Works	River/Stream	486703	18.80	MILES	2020	2	Salt River	Washington	57.30	76.10	37.81886	-85.24362	37.72667	-85.19305	2020
KY-3048		Split	KY-219	KY486703_04	Beech Fork 76.1 to 77.1	Springfield Water Works to 1 mile upstream	River/Stream	486703	1.00	MILES	2020	2	Salt River	Washington	76.10	77.10	37.72667	-85.19305	37.73504	-85.18453	2020
KY-3049		Split	KY-219	KY486703_04	Beech Fork 77.1 to 85.9	1 Mile Upstream of Springfield Water Works to Pleasant Run	River/Stream	486703	8.80	MILES	2020	2	Salt River	Washington	77.10	85.90	37.73504	-85.18453	37.70438	-85.14571	2020
KY-2082	KY510518-A_00	Rename			Beech Fork Reservoir (aka Stanton Reservoir)	Dam to Reservoir	Lake/Reservoir	495	62	ACRES	2016	2	Kentucky River	Powell			37.86424	-83.89308	37.87044	-83.89917	2020
KY-3188					Beech Fork UT 0.0 to 1.7	Mouth to Headwaters	River/Stream	486703	1.70	MILES	2020	4C	Salt River	Washington	0.00	1.70	37.82759	-85.25648	37.83475	-85.23105	2020
KY-222	KY486757_01	Rename			Beechy Creek 0.2 to 3.55	Kentucky Lake Backwaters to UT	River/Stream	486757	3.35	MILES	2000	2	Tennessee River	Calloway	0.20	3.55	36.56831	-88.14164	36.53761	-88.14475	2020
KY-223	KY486792_01	Rename			Bell Ditch 0.0 to 1.75	Mouth to UT	River/Stream	486792	1.75	MILES	2008	5	Ohio River	Daviess	0.00	1.75	37.81814	-86.95116	37.80401	-86.97135	2020
KY-3150					Bennett Branch 0.0 to 2.7	Mouth to headwaters	River/Stream	486853	2.70	MILES	2020	5	Licking River	Bath	0.00	2.70	38.16290	-83.95142	38.18909	-83.92631	2020
KY-224	KY486865_01	Rename			Bennetts Fork 0.45 to 3.6	Stony Fork to KY/TN State Line	River/Stream	486865	3.15	MILES	2008	5	Upper Cumberland River	Bell	0.45	3.60	36.61214	-83.74408	36.58386	-83.78346	2020
KY-225	KY486872_01	Rename			Bens Fork 0.0 to 2.2	Mouth to Headwaters	River/Stream	486872	2.20	MILES	2008	5	Upper Cumberland River	Bell	0.00	2.20	36.67945	-83.77274	36.67036	-83.80182	2020
KY-226	KY486877_01	Rename			Benson Creek 0.0 to 4.65	Mouth to South Benson Creek	River/Stream	486877	4.65	MILES	2000	5	Kentucky River	Franklin	0.00	4.65	38.20320	-84.88154	38.20824	-84.93756	2020
KY-229	KY486877_04	Rename			Benson Creek 13.7 to 18.8	Goose Creek to Upstream Landfill	River/Stream	486877	5.10	MILES	2016	5	Kentucky River	Franklin	13.70	18.80	38.15772	-85.00597	38.12672	-84.98998	2020
KY-230	KY486877_05	Rename			Benson Creek 22.1 to 25.7	KY 1315 to Pigeon Fork	River/Stream	486877	3.60	MILES	2000	2	Kentucky River	Anderson	22.10	25.70	38.11129	-85.00576	38.08517	-85.01927	2020
KY-227	KY486877_02	Rename			Benson Creek 4.65 to 6.8	South Benson Creek to North Benson Creek	River/Stream	486877	2.15	MILES	2000	5	Kentucky River	Franklin	4.65	6.80	38.20824	-84.93756	38.20655	-84.96498	2020
KY-228	KY486877_03	Rename			Benson Creek 6.8 to 13.7	North Benson Creek to Goose Creek	River/Stream	486877	6.90	MILES	2020	2B	Kentucky River	Shelby, Franklin	6.80	13.70	38.20655	-84.96498	38.15772	-85.00597	2020
KY-231	KY486878_01	Rename			Bent Branch 0.0 to 0.7	Mouth to Scott Fork	River/Stream	486878	0.70	MILES	2010	3	Big Sandy River	Pike	0.00	0.70	37.56967	-82.43876	37.57318	-82.42771	2020
KY-232	KY486913_01	Rename			Berry Creek 0.0 to 3.1	Mouth to Headwaters	River/Stream	486913	3.10	MILES	2016	5	Ohio River	Oldham, Henry	0.00	3.10	38.45486	-85.35122	38.48202	-85.31483	2020
KY-3189					Bethel Creek 0.0 to 2.7	Mouth to Indian Run	River/Stream	486996	2.70	MILES	2020	4C	Ohio River	Lewis	0.00	2.70	38.56650	-83.53638	38.57782	-83.50095	2020
KY-18	KY2094637_00	Rename			Beulah Lake (aka Tyner Lake)	Dam to Lake Boundary	Lake/Reservoir	2094637	76	ACRES	2020	2	Upper Cumberland River	Jackson			37.37678	-83.91187	37.37239	-83.90432	2020
KY-211	KY486674_01	Rename			Big Bee Lick Creek 0.0 to 4.15	Mouth to Jefferson Memorial Forest	River/Stream	486674	4.15	MILES	2014	4A	Salt River	Jefferson	0.00	4.15	38.12449	-85.78622	38.07846	-85.76576	2020
KY-234	KY487082_01	Rename			Big Bone Creek 1.15 to 10.8	Mudlick Creek to Headwaters	River/Stream	487082	9.65	MILES	2006	2	Ohio River	Boone	1.15	10.80	38.86142	-84.76285	38.94390	-84.71178	2020
KY-235	KY487110_01	Rename			Big Branch 0.0 to 2.65	Mouth to Headwaters	River/Stream	487110	2.65	MILES	2008	2	Big Sandy River	Pike	0.00	2.65	37.55601	-82.08885	37.52230	-82.08832	2020
KY-2083	KY510599_01	Rename			Big Branch 0.4 to 2.1	UT to Headwaters	River/Stream	510599	1.70	MILES	1998	2	Upper Cumberland River	McCreary	0.40	2.10	36.70173	-84.35462	36.67940	-84.36361	2020
KY-236	KY487146_01	Rename			Big Brush Creek 0.0 to 5.0	Mouth to Little Brush Creek	River/Stream	487146	5.00	MILES	2008	5	Green River	Green	0.00	5.00	37.29937	-85.65795	37.33426	-85.63185	2020
KY-239	KY487146_04	Rename			Big Brush Creek 12.9 to 17.4	Brush Creek to Poplar Grove Branch	River/Stream	487146	4.50	MILES	2008	2	Green River	Green	12.90	17.40	37.38472	-85.59302	37.42787	-85.57944	2020
KY-237	KY487146_02	Rename			Big Brush Creek 5.0 to 7.05	Little Brush Creek to Rocklick Creek	River/Stream	487146	2.05	MILES	2008	2	Green River	Green	5.00	7.05	37.33426	-85.63185	37.35206	-85.62677	2020
KY-238	KY487146_03	Rename			Big Brush Creek 7.05 to 12.9	Confluence with Rocklick Branch to Confluence with Brush Creek	River/Stream	487146	5.85	MILES	2008	4A	Green River	Green	7.05	12.90	37.35206	-85.62677	37.38472	-85.59302	2020
KY-2084	KY510632_01	Rename			Big Brushy Creek 0.0 to 1.8	Mouth to Little Brushy Creek	River/Stream	510632	1.80	MILES	2016	4A	Licking River	Rowan	0.00	1.80	38.20983	-83.46720	38.22211	-83.48644	2020
KY-240	KY487147_01	Rename			Big Brushy Creek 0.0 to 4.75	Mouth to Brushy Fork and Brushy Creek	River/Stream	487147	4.75	MILES	2020	5	Licking River	Nicholas	0.00	4.75	38.29641	-84.12606	38.30673	-84.08821	2020
KY-2085	KY510633_01	Rename			Big Buck Lick 0.0 to 2.65	Mouth to Headwaters	River/Stream	510633	2.65	MILES	2020	2	Kentucky River	Jackson	0.00	2.65	37.48629	-83.91159	37.48843	-83.95383	2020
KY-2086	KY510634_01	Rename			Big Calaboose Creek 0.0 to 2.2	Mouth to Headwaters	River/Stream	510634	2.20	MILES	2002	2	Kentucky River	Wolfe	0.00	2.20	37.80443	-83.52886	37.77553	-83.53131	2020
KY-241	KY487150_01	Rename			Big Caney Creek 0.3 to 8.9	Little Caney Creek to Headwaters	River/Stream	487150	8.60	MILES	2000	5	Kentucky River	Breathitt	0.30	8.90	37.58584	-83.19041	37.61947	-83.07496	2020
KY-2848					Big Caney Creek 0.65 to 1.95	Grayson Lake Backwaters to Oilfields	River/Stream	510635	1.30	MILES	2020	3	Little Sandy River	Elliott	0.65	1.95	38.15880	-83.09431	38.15048	-83.10901	2020
KY-2087	KY510635_01	Rename			Big Caney Creek 1.95 to 13.95	Oilfields to headwaters	River/Stream	510635	12.00	MILES	2004	2	Little Sandy River	Elliott, Rowan	1.95	13.95	38.15048	-83.10911	38.18904	-83.25950	2020
KY-2088	KY510638_01	Rename			Big Clifty Creek 0.0 to 0.95	Mouth to Dry Fork	River/Stream	510638	0.95	MILES	2020	4C	Upper Cumberland River	Pulaski	0.00	0.95	37.08856	-84.29830	37.09962	-84.30464	2020
KY-242	KY487156_01	Rename			Big Clifty Creek 1.4 to 4.9	Lake Cumberland to Little Clifty Creek	River/Stream	487156	3.50	MILES	2008	2	Upper Cumberland River	Pulaski	1.40	4.90	37.11424	-84.68632	37.15352	-84.66690	2020
KY-243	KY487156_02	Rename			Big Clifty Creek 4.9 to 6.8	Little Clifty Creek to UT (Science Hill WWTP)	River/Stream	487156	1.90	MILES	2012	5	Upper Cumberland River	Pulaski	4.90	6.80	37.15352	-84.66690	37.17363	-84.64904	2020
KY-244	KY487156-6.9_01	Rename			Big Clifty Creek UT 0.0 to 0.6	Mouth to Science Hill STP	River/Stream	487156	0.60	MILES	2002	3	Upper Cumberland River	Pulaski	0.00	0.60	37.17488	-84.64973	37.18408	-84.63518	2020
KY-246	KY487161_01	Rename			Big Creek 0.0 to 1.95	Mouth to Lick Branch	River/Stream	487161	1.95	MILES	2016	5	Big Sandy River	Pike	0.00	1.95	37.74087	-82.33314	37.73005	-82.35029	2020
KY-2089	KY510641_01	Rename			Big Creek 0.0 to 4.25	Mouth to Confluence of Bob's Fork and Hal's Fork (Which combine to form Big Creek)	River/Stream	510641	4.25	MILES	2016	4A	Kentucky River	Leslie, Clay	0.00	4.25	37.16645	-83.58219	37.16418	-83.51800	2020
KY-2090	KY510642_01	Rename			Big Creek 0.4 to 2.2	Mouth (Backwaters) to UT - 2nd Order @ Franklin Hollow	River/Stream	510642	1.80	MILES	2016	2	Upper Cumberland River	McCreary	0.40	2.20	36.78884	-84.52246	36.77372	-84.50081	2020
KY-248	KY487161_03	Rename			Big Creek 10.7 to 15.15	Confluence with Elkins Fork to Confluence with Road Fork	River/Stream	487161	4.45	MILES	2008	5	Big Sandy River	Pike	10.70	15.15	37.66407	-82.37742	37.62099	-82.35568	2020
KY-245	KY487159_01	Rename			Big Creek 3.85 to 9.2	Cool Springs Creek to Headwaters	River/Stream	487159	5.35	MILES	2008	5	Green River	Adair	3.85	9.20	37.08395	-85.44632	37.03261	-85.46554	2020
KY-247	KY487161_02	Rename			Big Creek 5.7 to 10.7	Swinge Camp Branch to Elkins Fork	River/Stream	487161	5.00	MILES	2016	5	Big Sandy River	Pike	5.70	10.70	37.70332	-82.35535	37.66407	-82.37751	2020
KY-2091	KY510642-1.1_01	Rename			Big Creek UT 0.0 to 1.8	Mouth to Headwaters	River/Stream	510642	1.80	MILES	2006	2	Upper Cumberland River	McCreary	0.00	1.80	36.78398	-84.51369	36.79334	-84.48809	2020
KY-1616	KY510647_01	Rename			Big Dan Branch 0.0 to 1.4	Mouth to Headwaters	River/Stream	510647	1.40	MILES	2000	2	Kentucky River	Clay	0.00	1.40	37.27356	-83.59305	37.28984	-83.59355	2020
KY-3190					Big Dog Branch 0.0 to 3.25	Mouth to Headwaters	River/Stream	510649	3.25	MILES	2020	2	Upper Cumberland River	Laurel	0.00	3.25	37.10047	-84.24827	37.07091	-84.28038	2020
KY-1617	KY510650_01	Rename			Big Double Creek 0.0 to 4.45	Mouth to Headwaters	River/Stream	510650	4.45	MILES	2004	2	Kentucky River	Clay	0.00	4.45	37.14045	-83.58766	37.09051	-83.60247	2020
KY-249	KY487182_01	Rename			Big Half Mountain Creek 0.0 to 4.05	Mouth to Equal Fork and Middle Fork	River/Stream	487182	4.05	MILES	2020	5	Licking River	Magoffin	0.00	4.05	37.65513	-83.01115	37.60785	-83.03081	2020
KY-250	KY487197_01	Rename			Big Indian Creek 0.0 to 9.7	Mouth to Headwaters	River/Stream	487197	9.70	MILES	2000	5	Upper Cumberland River	Knox	0.00	9.70	36.82181	-83.97106	36.91145	-83.97334	2020
KY-2092	KY510670_01	Rename			Big Laurel Creek 0.0 to 2.2	Mouth to Land Use Change	River/Stream	510670	2.20	MILES	2016	5	Kentucky River	Harlan	0.00	2.20	36.97893	-83.21906	36.98498	-83.18581	2020
KY-2093	KY510670_02	Rename			Big Laurel Creek 3.6 to 6.65	Arches Branch to Headwaters	River/Stream	510670	3.05	MILES	2004	2	Kentucky River	Harlan	3.60	6.65	36.99796	-83.17174	36.99970	-83.12701	2020
KY-2094	KY510674_01	Rename			Big Lick Branch 0.4 to 2.9	Lake Backwaters to Headwaters	River/Stream	510674	2.50	MILES	2002	2	Upper Cumberland River	Pulaski	0.40	2.90	36.96682	-84.37200	36.99108	-84.38537	2020
KY-251	KY487217_01	Rename			Big Lily Creek 0.0 to 5.15	Mouth to UT (Russels Springs POTW)	River/Stream	487217	5.15	MILES	2002	2	Upper Cumberland River	Russell	0.00	5.15	36.98930	-85.04102	37.04133	-85.07102	2020
KY-2095	KY510679_01	Rename			Big Middle Fork Elisha Creek 0.0 to 1.5	Mouth to Headwaters	River/Stream	510679	1.50	MILES	2006	2	Kentucky River	Leslie	0.00	1.50	37.08165	-83.51802	37.08060	-83.49175	2020
KY-252	KY487221_01	Rename			Big Mine Fork 1.25 to 4.2	Paintsville Lake to Tick Lick Creek	River/Stream	487221	2.95	MILES	2004	5	Big Sandy River	Magoffin, Johnson, Morgan	1.25	4.20	37.87133	-82.99189	37.84333	-83.00286	2020
KY-253	KY487221_02	Rename			Big Mine Fork 5.85 to 8.55	Land Use Change (Forest) to Headwaters	River/Stream	487221	2.70	MILES	2004	5	Big Sandy River	Magoffin	5.85	8.55	37.83286	-83.01141	37.80293	-83.02300	2020
KY-254	KY487227_01	Rename			Big Pitman Creek 0.0 to 13.9	Mouth to Little Pitman Creek	River/Stream	487227	13.90	MILES	2020	2C	Green River	Green	0.00	13.90	37.28645	-85.58101	37.31411	-85.51015	2020
KY-255	KY487227_02	Rename			Big Pitman Creek 13.9 to 17.8	Little Pitman Creek to Middle Pitman Creek	River/Stream	487227	3.90	MILES	2008	4A	Green River	Green	13.90	17.80	37.31411	-85.51015	37.33377	-85.48742	2020
KY-256	KY487227_03	Rename			Big Pitman Creek 17.8 to 23.7	Middle Pitman Creek to Locust Lick Branch	River/Stream	487227	5.90	MILES	2008	4A	Green River	Green, Taylor	17.80	23.70	37.33377	-85.48742	37.36792	-85.46460	2020
KY-257	KY487227_04	Rename			Big Pitman Creek 27.5 to 32.6	Mill Creek to Willowtown Creek	River/Stream	487227	5.10	MILES	2004	5	Green River	Taylor	27.50	32.60	37.39797	-85.46400	37.42104	-85.42563	2020
KY-258	KY487230_01	Rename			Big Reedy Branch 0.0 to 2.4	Mouth to Headwaters	River/Stream	487230	2.40	MILES	2020	5	Green River	Edmonson	0.00	2.40	37.26913	-86.44348	37.28806	-86.41430	2020
KY-2732		Split	KY-259	KY487231_01	Big Reedy Creek 0.0 to 7.3	Mouth to UT at approximately RM 7.3	River/Stream	487231	7.30	MILES	2020	5	Green River	Butler	0.00	7.30	37.16746	-86.47377	37.23403	-86.43998	2020
KY-2733		Split	KY-259	KY487231_01	Big Reedy Creek 7.3 to 12.25	UT at approximately RM 7.3 to West Fork of Big Reedy Creek	River/Stream	487231	4.95	MILES	2014	5	Green River	Butler, Edmonson	7.30	12.25	37.23394	-86.43992	37.29636	-86.44225	2020
KY-260	KY487232_01	Rename			Big Renox Creek 0.0 to 5.8	Mouth to Garrett Creek	River/Stream	487232	5.80	MILES	2000	5	Upper Cumberland River	Cumberland	0.00	5.80	36.83024	-85.36508	36.88313	-85.41646	2020
KY-3174		Split	KY-261	KY487247_01	Big Run Branch 0.6 to 3.1	Rough River Lake backwaters to spring connection	River/Stream	487247	2.50	MILES	2014	2	Green River	Grayson	0.60	3.10	37.52445	-86.35717	37.50770	-86.32774	2020
KY-3173		Split	KY-261	KY487247_01	Big Run Branch 3.1 to 4.85	spring connection to headwaters	River/Stream	487247	1.75	MILES	2020	4C	Green River	Grayson	3.10	4.85	37.50770	-86.32774	37.50474	-86.30104	2020
KY-262	KY487247-2.3_01	Rename			Big Run Branch UT 0.0 to 3.5	Mouth to Loss of Riparian Buffer and Unnamed Tributary from the South West	River/Stream	487247	3.50	MILES	2014	2	Green River	Grayson	0.00	3.50	37.50894	-86.33964	37.47771	-86.31929	2020
KY-263	KY487249_01	Rename			Big Sandy River 0.0 to 27.1	Ohio River to Levisa Fork/Tug Fork	River/Stream	487249	27.10	MILES	2010	5	Big Sandy River	Boyd	0.00	27.10	38.41825	-82.59358	38.11810	-82.60154	2020
KY-264	KY487249-11.1_01	Rename			Big Sandy River UT 0.0 to 1.0	Mouth to Point of Discharge	River/Stream	487249	1.00	MILES	2010	3	Big Sandy River	Boyd	0.00	1.00	38.27403	-82.57391	38.26736	-82.58342	2020
KY-265	KY487255_01	Rename			Big Sinking Creek 0.0 to 5.7	Little Sandy River to Clay Pits	River/Stream	487255	5.70	MILES	2010	2	Little Sandy River	Carter	0.00	5.70	38.25562	-82.99464	38.25906	-83.05679	2020
KY-2826		Split	KY-266	KY487255_02	Big Sinking Creek 11.1 to 16.4	KY-986 to Arabs Fork	River/Stream	487255	5.30	MILES	2020	2	Little Sandy River	Elliott, Carter	11.10	16.40	38.24972	-83.11729	38.22360	-83.15915	2020
KY-2096	KY510697_01	Rename			Big Sinking Creek 3.7 to 6.2	UT/Land use change to Little Sinking Creek	River/Stream	510697	2.50	MILES	2010	2	Kentucky River	Lee	3.70	6.20	37.63943	-83.78475	37.64896	-83.75983	2020
KY-2827		Split	KY-266	KY487255_02	Big Sinking Creek 5.7 to 11.1	Clay Pits to KY-986	River/Stream	487255	5.40	MILES	2020	2	Little Sandy River	Elliott, Carter	5.70	11.10	38.25906	-83.05679	38.24972	-83.11729	2020
KY-267	KY487258_01	Rename			Big South Fork 0.0 to 12.65	North Rolling Fork to Martin Creek	River/Stream	487258	12.65	MILES	2020	4A	Salt River	Marion, Casey	0.00	12.65	37.49209	-85.15960	37.43926	-85.01643	2020
KY-268	KY487258_02	Rename			Big South Fork 16.6 to 18.0	Scuffle Creek to White Oak Creek	River/Stream	487258	1.40	MILES	2006	2	Salt River	Casey	16.60	18.00	37.46707	-84.96749	37.46870	-84.94757	2020
KY-269	KY487259_01	Rename			Big South Fork 2.1 to 4.1	Ohio River Backwaters to UT (with AFO - Swine Farm)	River/Stream	487259	2.00	MILES	2010	5	Ohio River	Boone, Gallatin	2.10	4.10	38.84756	-84.76884	38.83090	-84.75102	2020
KY-2786		Split	KY-2556	KY515542_03	Big South Fork Cumberland River 43.8 to 44.9	Roaring Paunch Creek to Wild River Boundary at Blue Heron	River/Stream	515542	1.10	MILES	2020	2	Upper Cumberland River	McCreary	43.80	44.90	36.68066	-84.54150	36.66769	-84.54570	2020
KY-2787		Split	KY-2556	KY515542_03	Big South Fork Cumberland River 44.9 to 49.5	Wild River Boundary at Blue Heron to Bear Creek	River/Stream	515542	4.60	MILES	2012	2	Upper Cumberland River	McCreary	44.90	49.50	36.66769	-84.54570	36.62698	-84.53366	2020
KY-2557	KY515542_04	Rename			Big South Fork Cumberland River 49.5 to 54.8	Bear Creek to KY/TN State Line	River/Stream	515542	5.30	MILES	2012	2	Upper Cumberland River	McCreary	49.50	54.80	36.62698	-84.53366	36.59879	-84.60519	2020
KY-2674	KY90001145_00	Rename			Big Spring (Princeton)	Entire Springshed of Big Spring (Princeton)	Spring	90001145	1628	ACRES	2020	5	Lower Cumberland River	Caldwell			37.10800	-87.88147	37.12804	-87.91241	2020
KY-3178					Big Spring Branch 0.0 to 2.2	Mouth to Headwaters	River/Stream	487263	2.20	MILES	2020	4C	Upper Cumberland River	Pulaski	0.00	2.20	37.16259	-84.50080	37.14352	-84.52290	2020
KY-270	KY487280_01	Rename			Big Sugar Creek 0.7 to 1.8	Ohio River Backwaters to UT	River/Stream	487280	1.10	MILES	2006	5	Ohio River	Gallatin	0.70	1.80	38.77408	-84.81324	38.75959	-84.82118	2020
KY-271	KY487280-1.8_01	Rename			Big Sugar Creek UT 1.0 to 1.8	I-71 to UT	River/Stream	487280	0.80	MILES	2006	2	Ohio River	Gallatin	1.00	1.80	38.74961	-84.81112	38.73930	-84.81261	2020
KY-2718					Big Sugar Creek UT 1.8 to 3.4	UT to Headwaters	River/Stream	487280	1.60	MILES	2020	3	Ohio River	Gallatin	1.80	3.40	38.73930	-84.81261	38.73721	-84.78947	2020
KY-272	KY487286_01	Rename			Big Twin Creek 0.0 to 3.8	Mouth to UT	River/Stream	487286	3.80	MILES	2000	5	Kentucky River	Owen	0.00	3.80	38.55232	-85.00246	38.55539	-84.94932	2020
KY-2097	KY510708_01	Rename			Big Willard Creek 0.0 to 4.7	Mouth to Headwaters	River/Stream	510708	4.70	MILES	2000	5	Kentucky River	Perry	0.00	4.70	37.27736	-83.29288	37.22654	-83.32291	2020
KY-2098	KY510714_01	Rename			Bill Branch 0.0 to 0.25	Mouth to Confluence of Right and Left Forks Bill Branch	River/Stream	510714	0.25	MILES	2006	2	Kentucky River	Harlan	0.00	0.25	36.93025	-83.30921	36.93249	-83.30578	2020
KY-273	KY487299_01	Rename			Bill D Branch 0.0 to 1.1	Mouth to Righthand Fork	River/Stream	487299	1.10	MILES	2010	5	Big Sandy River	Knott	0.00	1.10	37.32030	-82.80388	37.28716	-82.81601	2020
KY-274	KY487299_02	Rename			Bill D Branch 1.1 to 2.9	Righthand Fork to Headwaters	River/Stream	487299	1.80	MILES	2010	5	Big Sandy River	Knott	1.10	2.90	37.30977	-82.81601	37.28716	-82.81162	2020
KY-2099	KY510716_01	Rename			Bill Oak Branch 0.0 to 0.65	Mouth to Headwaters	River/Stream	510716	0.65	MILES	2020	4C	Kentucky River	Owsley	0.00	0.65	37.33523	-83.56577	37.33119	-83.55526	2020
KY-2100	KY510719_01	Rename			Billey Fork 2.6 to 8.8	Land Use Change to Headwaters	River/Stream	510719	6.20	MILES	2004	2	Kentucky River	Estill, Lee	2.60	8.80	37.67957	-83.79653	37.72510	-83.72466	2020
KY-2101	KY510724_01	Rename			Bills Branch 2.35 to 3.7	Point of withdrawal to headwaters	River/Stream	510724	1.35	MILES	2020	2	Upper Cumberland River	Jackson	2.35	3.70	37.45687	-83.97847	37.47537	-83.97590	2020
KY-275	KY487317_01	Rename			Billy Creek 0.0 to 4.8	Mouth to Confluence of two UTs	River/Stream	487317	4.80	MILES	2008	5	Green River	Hardin	0.00	4.80	37.67459	-85.89277	37.70921	-85.93473	2020
KY-276	KY487347_01	Rename			Bishop Ditch 0.0 to 2.7	Caney Fork to Bordley Ditch	River/Stream	487347	2.70	MILES	2004	5	Tradewater River	Webster, Union	0.00	2.70	37.50594	-87.84386	37.52431	-87.88304	2020
KY-2102	KY510748_01	Rename			Black Creek 0.0 to 4.15	Mouth to Headwaters	River/Stream	510748	4.15	MILES	2002	2	Kentucky River	Powell	0.00	4.15	37.87306	-83.92935	37.91926	-83.91854	2020
KY-277	KY487361-1.2_01	Rename			Black Creek UT 0.0 to 2.1	Mouth to UT / Riparian Vegetation Buffer	River/Stream	487361	2.10	MILES	2014	5	Tradewater River	Caldwell	0.00	2.10	37.18571	-87.93916	37.16372	-87.93452	2020

KY-312	KY487773_01	Rename			Boyd Run 0.0 to 0.9	Mouth to Cherry Run	River/Stream	487773	0.90 MILES	2020 2	Kentucky River	Scott	0.00	0.90	38.21316	-84.48529	38.21731	-84.47430	2020
KY-3191					Bracken Creek 10.85 to 16.85	UT to Headwaters	River/Stream	487783	6.00 MILES	2020 4C	Ohio River	Bracken	10.85	16.85	38.71600	-83.95504	38.65752	-83.95504	2020
KY-313	KY487783_01	Rename			Bracken Creek 2.6 to 10.85	Ohio River Backwaters to UT	River/Stream	487783	8.25 MILES	2006 5	Ohio River	Bracken	2.60	10.85	38.77447	-83.99332	38.71600	-83.95504	2020
KY-2705					Branham Branch 0.0 to 0.85	Mouth to UT where forested corridor of stream increases	River/Stream	510896	0.85 MILES	2020 5	Kentucky River	Powell	0.00	0.85	37.78535	-83.88299	37.77462	-83.88663	2020
KY-314	KY487840_01	Rename			Brashears Creek 0.0 to 13.0	Mouth to Guist Creek	River/Stream	487840	13.00 MILES	2020 4A	Salt River	Spencer, Shelby	0.00	13.00	38.02776	-85.34755	38.09920	-85.28615	2020
KY-315	KY487840_02	Rename			Brashears Creek 13.0 to 25.9	Guist Creek Confluence to Bullskin/Clear Creek Confluence	River/Stream	487840	12.90 MILES	2020 4A	Salt River	Spencer, Shelby	13.00	25.90	38.09920	-85.28615	38.16191	-85.28012	2020
KY-2108	KY510901_01	Rename			Breeden Creek 0.0 to 3.6	Mouth to Headwaters	River/Stream	510901	3.60 MILES	2020 2	Upper Cumberland River	Harlan	0.00	3.60	36.88389	-83.01497	36.90670	-82.96914	2020
KY-316	KY487857_01	Rename			Breeding Creek 0.8 to 4.15	Reservoir to Source	River/Stream	487857	3.35 MILES	2010 5	Kentucky River	Knott	0.80	4.15	37.22050	-82.96493	37.20899	-82.91548	2020
KY-317	KY487880_01	Rename			Briar Creek 0.0 to 4.4	Mouth to UT	River/Stream	487880	4.40 MILES	2010 2	Upper Cumberland River	Pulaski	0.00	4.40	37.27543	-84.57394	37.26207	-84.63530	2020
KY-2109	KY510908_01	Rename			Brices Creek 0.0 to 3.2	Mouth to Headwaters	River/Stream	510908	3.20 MILES	2002 2	Upper Cumberland River	Knox	0.00	3.20	36.88992	-83.73561	36.92712	-83.72036	2020
KY-3192					Bridge Fork 0.0 to 4.6	Mouth to East Apple Tree Branch	River/Stream	510913	4.60 MILES	2020 4C	Green River	McCreary	0.00	4.60	36.72832	-84.40343	36.71306	-84.45019	2020
KY-318	KY487897_01	Rename			Brier Creek 0.0 to 4.9	Mouth to Headwaters	River/Stream	487897	4.90 MILES	2004 4A	Green River	Muhlenberg	0.00	4.90	37.34790	-87.31723	37.31379	-87.26663	2020
KY-319	KY487905_01	Rename			Briery Branch 0.0 to 1.95	Ohio River Backwaters to Schultz Fork	River/Stream	487905	1.95 MILES	2006 5	Ohio River	Lewis	0.00	1.95	38.62482	-83.13784	38.61036	-83.11443	2020
KY-320	KY487909_00	Rename			Briggs Lake	Entire Reservoir	Lake/Reservoir	487909	19 ACRES	2020 5	Green River	Logan			36.88852	-86.83310	36.89056	-86.82547	2020
KY-2110	KY510930_01	Rename			Britton Branch 0.0 to 1.2	Mouth to Headwaters	River/Stream	510930	1.20 MILES	2016 5	Kentucky River	Clay	0.00	1.20	37.16001	-83.63791	37.14715	-83.64700	2020
KY-321	KY487933_01	Rename			Broad Run 0.0 to 5.3	Buck Run Confluence to Headwaters	River/Stream	487933	4.40 MILES	2012 4C	Salt River	Bullitt, Jefferson, Spencer	0.90	5.30	38.10474	-85.52885	38.08518	-85.46449	2020
KY-2111	KY510936_01	Rename			Broke Leg Creek 0.0 to 0.95	Mouth to Coon Creek	River/Stream	510936	0.95 MILES	2010 2	Licking River	Morgan	0.00	0.95	37.91011	-83.42936	37.91232	-83.44310	2020
KY-2112	KY510936_02	Rename			Broke Leg Creek 0.95 to 5.25	Coon Creek to Headwaters	River/Stream	510936	4.30 MILES	2006 5	Licking River	Menifee, Morgan	0.95	5.25	37.91232	-83.44310	37.90485	-83.50857	2020
KY-322	KY487965_01	Rename			Brooks Creek 0.0 to 4.9	Mouth to Headwaters	River/Stream	487965	4.90 MILES	2004 2	Tradewater River	Hopkins	0.00	4.90	37.27058	-87.79355	37.25010	-87.73198	2020
KY-324	KY487968_01	Rename			Brooks Run 0.0 to 2.7	Mouth to Joy Lane	River/Stream	487968	2.70 MILES	2012 5	Salt River	Bullitt	0.00	2.70	38.01766	-85.68292	38.04070	-85.68675	2020
KY-325	KY487968_02	Rename			Brooks Run 2.7 to 4.35	Joy Lane to UT	River/Stream	487968	1.65 MILES	2012 5	Salt River	Bullitt	2.70	4.35	38.04070	-85.68675	38.05929	-85.69578	2020
KY-326	KY487968_03	Rename			Brooks Run 4.35 to 6.4	Confluence with UT to 0.1 mile above Coral Ridge Road	River/Stream	487968	2.05 MILES	2012 5	Salt River	Bullitt	4.35	6.40	38.05929	-85.69578	38.07757	-85.71655	2020
KY-23	KY487968-4.3_01	Rename			Brooks Run UT 0.0 to 2.0	Mouth to Headwaters	River/Stream	487968	2.00 MILES	2000 5	Salt River	Bullitt	0.00	2.00	38.05929	-85.69578	38.07961	-85.67425	2020
KY-327	KY487968-2.9-0.2_01	Rename			Brooks Run UT of UT 0.0 to 0.3	Mouth to WWTP	River/Stream	487968	0.30 MILES	2012 3	Salt River	Bullitt	0.00	0.30	38.04554	-85.68481	38.04516	-85.67999	2020
KY-24	KY488020_01	Rename			Brownies Creek 9.9 to 16.7	Sugarcamp Branch to Headwaters	River/Stream	488020	6.80 MILES	2012 2	Upper Cumberland River	Harlan, Bell	9.90	16.70	36.70281	-83.50519	36.69668	-83.40904	2020
KY-25	KY488068_01	Rename			Brush Creek 0.0 to 1.8	Mouth to UT of Brush Creek	River/Stream	488068	1.80 MILES	2016 5	Ohio River	Oldham	0.00	1.80	38.44062	-85.42898	38.42372	-85.41135	2020
KY-334	KY488077_01	Rename			Brush Creek 0.0 to 2.1	Confluence with Big Brush Creek to Meadow Branch Creek	River/Stream	488077	2.10 MILES	2008 4A	Green River	Green	0.00	2.10	37.38472	-85.59303	37.39350	-85.62075	2020
KY-328	KY488069_01	Rename			Brush Creek 0.0 to 2.4	Mouth to UT near SR1121	River/Stream	488069	2.40 MILES	2012 5	Green River	Hart	0.00	2.40	38.94688	-84.34715	38.97530	-84.37530	2020
KY-332	KY488072_01	Rename			Brush Creek 0.0 to 3.1	Mouth to Little Brush Creek	River/Stream	488072	3.10 MILES	2000 5	Upper Cumberland River	Knox	0.00	3.10	36.82266	-83.83995	36.80323	-83.84388	2020
KY-333	KY488079_01	Rename			Brush Creek 0.0 to 5.15	Mouth to Headwaters	River/Stream	488079	5.15 MILES	2016 5	Salt River	Mercer	0.00	5.15	37.88844	-85.02061	37.88419	-84.94446	2020
KY-329	KY488076_01	Rename			Brush Creek 0.0 to 6.15	Mouth to Reynold Creek	River/Stream	488076	6.15 MILES	2008 5	Green River	Casey	0.00	6.15	37.29456	-84.96969	37.36763	-84.91264	2020
KY-331	KY488071_01	Rename			Brush Creek 0.0 to 6.3	Mouth to UT	River/Stream	488071	6.30 MILES	2000 5	Mississippi River	Hickman	0.00	6.30	36.73394	-89.03676	36.69766	-88.94657	2020
KY-2114	KY510969_01	Rename			Brush Creek 0.0 to 6.85	Mouth to Headwaters	River/Stream	510969	6.85 MILES	2016 5	Kentucky River	Powell	0.00	6.85	37.85921	-83.93292	37.91673	-83.93705	2020
KY-335	KY488070_01	Rename			Brush Creek 0.0 to 8.4	Mouth to Barn Creek	River/Stream	488070	8.40 MILES	2002 5	Mississippi River	Hickman, Graves	0.00	8.40	36.69823	-88.83270	36.61381	-88.74455	2020
KY-336	KY488080_01	Rename			Brush Creek 0.0 to 9.8	Mouth to Sand Lick Branch	River/Stream	488080	9.80 MILES	2000 2	Kentucky River	Grant, Owen	0.00	9.80	38.68606	-84.76416	38.63821	-84.80915	2020
KY-2113	KY510966_01	Rename			Brush Creek 1.1 to 7.6	Wolf Creek to reemergence of Brushy Creek from sinking stream segment	River/Stream	510966	6.50 MILES	2002 4A	Upper Cumberland River	Rockcastle	1.10	7.60	37.38934	-84.26451	37.46557	-84.22675	2020
KY-330	KY488070-3.3_01	Rename			Brush Creek UT 0.0 to 2.2	Mouth to Headwaters	River/Stream	488070	2.20 MILES	2006 5	Mississippi River	Graves	0.00	2.20	36.65714	-88.80801	36.67300	-88.77893	2020
KY-337	KY488089_01	Rename			Brush Fork 0.0 to 6.85	Mouth to headwaters	River/Stream	488089	6.85 MILES	2020 5	Green River	McLean, Daviess	0.00	6.85	37.59077	-87.22298	37.62846	-87.27968	2020
KY-338	KY488111_01	Rename			Brushy Creek 0.0 to 3.85	Mouth to River Fork	River/Stream	488111	3.85 MILES	2004 2	Tygarts Creek	Greenup	0.00	3.85	38.55973	-82.95274	38.59665	-83.01365	2020
KY-2115	KY510974_01	Rename			Brushy Creek 0.0 to 8.0	Mouth to Bee Lick Creek	River/Stream	510974	8.00 MILES	2016 2	Upper Cumberland River	Pulaski	0.00	8.00	37.21220	-84.46736	37.26770	-84.43763	2020
KY-2116	KY510974_02	Rename			Brushy Creek 8.0 to 16.5	Bee Lick Creek to Headwaters	River/Stream	510974	8.50 MILES	2016 5	Upper Cumberland River	Pulaski, Rockcastle	8.00	16.50	37.26770	-84.43763	37.35880	-84.49108	2020
KY-340	KY488124_01	Rename			Brushy Fork 0.0 to 1.1	Mouth to Headwaters	River/Stream	488124	1.10 MILES	2016 5	Licking River	Johnson	0.00	1.10	37.75483	-82.69062	37.76404	-82.67605	2020
KY-342	KY488137_01	Rename			Brushy Fork 0.0 to 10.1	Mouth to Big Branch	River/Stream	488137	10.10 MILES	2010 5	Big Sandy River	Pike, Floyd	0.00	10.10	37.68079	-82.59030	37.67076	-82.49056	2020
KY-2118	KY510978_01	Rename			Brushy Fork 0.0 to 2.25	Mouth to Anderson Branch	River/Stream	510978	2.25 MILES	2000 2	Licking River	Fleming	0.00	2.25	38.34431	-83.53794	38.36724	-83.53793	2020
KY-2117	KY510977_01	Rename			Brushy Fork 0.0 to 4.5	Mouth to Headwaters	River/Stream	510977	4.50 MILES	2014 5	Ohio River	Crittenden	0.00	4.50	37.38534	-88.04013	37.36312	-88.00736	2020
KY-341	KY488131_01	Rename			Brushy Fork 0.0 to 5.85	Mouth to Headwaters	River/Stream	488131	5.85 MILES	2012 5	Licking River	Pendleton	0.00	5.85	38.70106	-84.44697	38.64353	-84.49533	2020
KY-2119	KY510979_01	Rename			Brushy Fork 0.65 to 5.85	Cave Run Lake Backwaters to Headwaters	River/Stream	510979	5.20 MILES	2020 2	Licking River	Menifee	0.65	5.85	38.08439	-83.50523	37.93459	-83.48172	2020
KY-339	KY488121_01	Rename			Brushy Fork 2.65 to 6.1	Bioregion Shift (Bluegrass to Pennyroyal) to Headwaters	River/Stream	488121	3.45 MILES	2016 5	Kentucky River	Madison	2.65	6.10	37.56014	-84.30306	37.54433	-84.34283	2020
KY-343	KY488150_01	Rename			Brushy Pond Creek 1.4 to 6.0	Browns Branch to Headwaters	River/Stream	488150	4.60 MILES	2008 2	Green River	Butler, Grayson	1.40	6.00	37.41003	-86.59345	37.38253	-86.55738	2020
KY-3158					Bryant Creek 0.0 to 4.0	Mouth to Headwaters	River/Stream	488167	4.00 MILES	2020 4C	Green River	Adair	0.00	4.00	37.17937	-85.18337	37.15994	-85.13116	2020
KY-345	KY488169_01	Rename			Bryant Ditch 0.0 to 3.05	Mouth to US Highway 60	River/Stream	488169	3.05 MILES	2014 5	Green River	Daviess, Henderson	0.00	3.05	37.83660	-87.32976	37.83630	-87.29289	2020
KY-346	KY488181_01	Rename			Buchanan Creek 0.0 to 3.8	Mouth to Headwaters	River/Stream	488181	3.80 MILES	2006 2	Salt River	Anderson, Mercer	0.00	3.80	37.93963	-84.90347	37.95019	-84.95057	2020
KY-347	KY488192_01	Rename			Buck Branch 0.0 to 2.8	Mouth to Headwaters	River/Stream	488192	2.80 MILES	2010 5	Big Sandy River	Floyd	0.00	2.80	37.56992	-82.75611	37.59683	-82.79068	2020
KY-2130	KY511004_01	Rename			Buck Creek 0.0 to 2.8	Mouth to UT	River/Stream	511004	2.80 MILES	2000 2	Kentucky River	Estill	0.00	2.80	37.64439	-83.87261	37.67332	-83.89093	2020
KY-2129	KY511003_01	Rename			Buck Creek 0.0 to 4.1	Mouth to Headwaters	River/Stream	511003	4.10 MILES	2002 2	Kentucky River	Owsley	0.00	4.10	37.47955	-83.67497	37.46636	-83.71753	2020
KY-2128	KY511001_01	Rename			Buck Creek 0.0 to 7.55	Mouth to UT	River/Stream	511001	7.55 MILES	2004 2	Ohio River	Livingston	0.00	7.55	37.40261	-88.36768	37.32866	-88.37214	2020
KY-349	KY488213_01	Rename			Buck Creek 0.0 to 8.0	Mouth to UT Ditch	River/Stream	488213	8.00 MILES	2004 5	Green River	McLean	0.00	8.00	37.50522	-87.20041	37.53354	-87.11223	2020
KY-2120	KY510998_01	Rename			Buck Creek 0.45 to 2.75	Road to Headwaters	River/Stream	510998	2.30 MILES	2002 2	Upper Cumberland River	Whitley	0.45	2.75	36.64493	-84.09908	36.64810	-84.06313	2020
KY-2121	KY511000_01	Rename			Buck Creek 11.75 to 32.35	Backwaters of Lake Cumberland to Brushy Creek	River/Stream	511000	20.60 MILES	2012 2	Upper Cumberland River	Pulaski	11.75	32.35	37.04926	-84.42962	37.21220	-84.46736	2020
KY-348	KY488210_01	Rename			Buck Creek 2.25 to 8.2	Forbes Creek to Headwaters	River/Stream	488210	5.95 MILES	2004 5	Green River	Christian	2.25	8.20	36.98714	-87.33153	36.95462	-87.40825	2020
KY-2122	KY511000_02	Rename			Buck Creek 32.35 to 40.85	Brushy Creek to Barney Branch	River/Stream	511000	8.50 MILES	2010 2	Upper Cumberland River	Pulaski	32.35	40.85	37.21220	-84.46736	37.24479	-84.54203	2020
KY-2123	KY511000_03	Rename			Buck Creek 40.85 to 45.3	Barney Branch to Briary Creek	River/Stream	511000	4.45 MILES	2020 2	Upper Cumberland River	Pulaski	40.85	45.30	37.24479	-84.54203	37.27543	-84.57394	2020
KY-2124	KY511000_05	Rename			Buck Creek 45.3 to 45.7	Briary Creek to Caney Creek	River/Stream	511000	0.40 MILES	2016 2	Upper Cumberland River	Pulaski	45.30	45.70	37.27543	-84.57394	37.28000	-84.57742	2020
KY-2125	KY511000_06	Rename			Buck Creek 45.7 to 53.1	Caney Creek to Gilmore Creek	River/Stream	511000	7.40 MILES	2006 5	Upper Cumberland River	Lincoln, Pulaski	45.70	53.10	37.28000	-84.57742	37.34622	-84.57864	2020
KY-3068		Split	KY-2126	KY511000_07	Buck Creek 53.1 to 55.0	Gilmore Creek to 0.8 River Miles Upstream of Hurricane Creek	River/Stream	511000	1.90 MILES	2002 2	Upper Cumberland River	Lincoln	53.10	55.00	37.34622	-84.57864	37.35997	-84.59522	2020
KY-3069		Split	KY-2126	KY511000_07	Buck Creek 55.0 to 58.1	0.8 River Miles Upstream of Hurricane Creek to Stanford Water Works	River/Stream	511000	3.10 MILES	2002 2	Upper Cumberland River	Lincoln	55.00	58.10	37.35997	-84.59522	37.39352	-84.60845	2020
KY-3067		Split	KY-2126	KY511000_07	Buck Creek 58.1 to 59.1	Stanford Water Works to UT (3rd Order)	River/Stream	511000	1.00 MILES	2002 3	Upper Cumberland River	Lincoln	58.10	59.10	37.39352	-84.60845	37.40459	-84.61591	2020
KY-350	KY488213_02	Rename			Buck Creek 8.0 to 11.0	UT to Buck Creek to Headwaters	River/Stream	488213	3.00 MILES	2016 5	Green River	McLean, Daviess	8.00	11.00	37.53354	-87.11223	37.57474	-87.10002	2020
KY-2127	KY511000-A_00	Rename			Buck Creek Lake	Entire Reservoir	Lake/Reservoir	511000.1	43 ACRES	2010 5	Upper Cumberland River	Lincoln			37.39452	-84.60830	37.40286	-84.61359	2020
KY-351	KY488213-8.0_01	Rename			Buck Creek UT 0.0 to 1.7	Mouth to 3rd UT	River/Stream	488213	1.70 MILES	2014 4A	Green River	McLean	0.00	1.70	37.53354	-87.11223	37.54796	-87.08525	2020
KY-3254					Buck Creek UT 0.0 to 2.45	Mouth to Headwaters	River/Stream	511004	2.45 MILES	2020 3	Kentucky River	Estill	0.00	2.45	37.63790	-83.87833	37.64399	-83.91247	2020
KY-352	KY488223_01	Rename			Buck Fork Pond River 0.0 to 5.8	Mouth to Dullin Creek	River/Stream	488223	5.80 MILES	2008 5	Green River	Todd, Christian	0.00	5.80	37.04832	-87.25107	37.03259	-87.29681	2020
KY-353	KY488223_02	Rename			Buck Fork Pond River 12.9 to 19.3	Buck Creek to Caney Creek	River/Stream	488223	6.40 MILES	2014 5	Green River	Todd, Christian	12.90	19.30	36.99281	-87.29907	36.94596	-87.27476	2020
KY-354	KY488223_03	Rename			Buck Fork Pond River 20.9 to 22.05	near confluence of 2nd order UT to Impoundment Dam	River/Stream	488223	1.15 MILES	2014 2	Green River	Todd	20.90	22.05	36.93221	-87.25949	36.92203	-87.24804	2020
KY-3266					Buck Horn Creek 0.0 to 5.75	mouth to headwaters	River/Stream	488226	5.75 MILES	2020 2	Green River	Taylor	0.00	5.75	37.34936	-85.38025	37.36439	-85.30459	2020
KY-3193					Buck Lick Branch 0.0 to 1.05	Mouth to Headwaters	River/Stream	488236	1.05 MILES	2020 2	Licking River	Magoffin	0.00	1.05	37.86863	-83.09646	37.85451	-83.09442	2020
KY-355	KY488243_01	Rename			Buck Run 0.0 to 5.75	Mouth to Headwaters	River/Stream	488243	5.75 MILES	2016 5	Kentucky River	Owen	0.00	5.75	38.61124	-85.03683	38.60619	-84.99157	2020
KY-2131	KY511016_01	Rename			Bucket Branch 0.0 to 2.0	Mouth to Headwaters	River/Stream	511016	2.00 MILES	2020 2	Licking River	Magoffin	0.00	2.00	38.05191	-83.31649	38.07360	-83.30394	2020
KY-356	KY488267_01	Rename			Buckhorn Creek 0.0 to 2.3	Mouth to Headwaters	River/Stream	488267	2.30 MILES	1998 3	Salt River	Marion	0.00	2.30	37.53424	-85.30464	37.50662	-85.29508	2020
KY-357	KY488268_01	Rename			Buckhorn Creek 0.0 to 2.4	Troublesome Creek to Long Fork	River/Stream	488268	2.40 MILES	2020 4A	Kentucky River	Breathitt	0.00	2.40	37.44335	-83.21467	37.44654	-83.18989	2020
KY-358	KY488268_02	Rename			Buckhorn Creek 2.4 to 6.8	Long Fork to Coles Fork	River/Stream	488268	4.40 MILES	2006 5	Kentucky River	Breathitt	2.40	6.80	37.44654	-83.18989	37.45732	-83.13457	2020
KY-2132	KY511027_00	Rename			Buckhorn Lake	Dam to Upper Reservoir Boundaries	Lake/Reservoir	511027	1157 ACRES	2020 5	Kentucky River	Perry, Leslie			37.33991	-83.47025	37.25961	-83.37845	2020
KY-2133	KY511033_01	Rename			Bucks Branch 0.0 to 2.5	Mouth to Headwaters	River/Stream	511033	2.50 MILES	1998 2	Upper Cumberland River	Whitley, McCreary	0.00	2.50	36.66358	-84.26444	36.65586	-84.29957	2020
KY-2134	KY511036_01	Rename			Buffalo Branch 0.0 to 1.6	Mouth to Forested Cover	River/Stream	511036	1.60 MILES	2016 4A	Licking River	Rowan	0.00	1.60	38.24271	-83.34232	38.22581	-83.32620	2020
KY-359	KY488304_01	Rename			Buffalo Branch 1.2 to 2.0	Reservoir backwaters to Discharge	River/Stream	488304	0.80 MILES	2010 3	Little Sandy River	Greenup	1.20	2.00	38.47949	-82.89374	38.47911	-82.87863	2020
KY-363	KY488319_01	Rename			Buffalo Creek 0.0 to 1.55	Mouth to Pelco Twin Hills Discharge	River/Stream	488319	1.55 MILES	2010 3	Big Sandy River	Johnson	0.00	1.55	37.80445	-82.76031	37.79540	-82.74648	2020
KY-2135	KY511040_01	Rename			Buffalo Creek 0.0 to 1.65	Mouth to the Confluence of Right Fork and Left Fork	River/Stream	511040	1.65 MILES	2010 2	Kentucky River	Owsley	0.00	1.65	37.35051	-83.65233	37.35164	-83.63574	2020
KY-362	KY488317_01	Rename			Buffalo Creek 0.0 to 1.85	Mouth to Horse Branch	River/Stream	488317	1.85 MILES	2004 5	Licking River	Magoffin	0.00	1.85	37.68444	-82.65239	37.66762	-82.65007	2020
KY-360	KY488315_01	Rename			Buffalo Creek 0.0 to 3.5	Mouth to Forested Headwaters	River/Stream	488315	3.50 MILES	2016 5	Licking River	Magoffin	0.00	3.50	37.79514	-83.09238	37.81798	-83.04370	2020
KY-361	KY488316_01	Rename			Buffalo Creek 0.0 to 6.8	Mouth to Headwaters	River/Stream	488316	6.80 MILES	2004 5	Tradewater River	Hopkins	0.00	6.80	37.15384	-87.64868	37.13605	-87.56548	2020
KY-364	KY488320_01	Rename			Buffalo Creek 0.0 to 6.9	Mouth to Smith Creek	River/Stream	488320	6.90 MILES	2016 4A	Tygarts Creek	Carter	0.00	6.90	38.46527	-83.05067	38.43024	-83.12172	2020
KY-8	KY1278909_01	Rename			Buffalo Creek 2.6 to 3.9	KY/TN State Line to Headwaters	River/Stream	1278909	1.30 MILES	2002 2	Upper Cumberland River	Whitley	2.60	3.90	36.58886	-83.94978	36.60093	-83.93530	2020
KY-365	KY488320_02	Rename			Buffalo Creek 6.9 to 10.05	Smith Creek to McGlone Fork	River/Stream	488320	3.15 MILES	2010 2	Tygarts Creek	Carter	6.90	10.05	38.43024	-83.12172	38.40841	-83.15681	2020
KY-366	KY488333-1.5_01	Rename			Buffalo Run UT 0.0 to 1.1	Mouth to Change in Land Use	River/Stream	488333	1.10 MILES	2004 5	Salt River	Bullitt	0.00	1.10	37.97481	-85.68832	37.96236	-85.69090	2020
KY-367	KY488350_01	Rename			Bull Creek 0.0 to 1.0	Mouth to Whiteside Creek	River/Stream	488350	1.00 MILES	2004 5	Tradewater River	Webster	0.00	1.00	37.44139	-87.71397	37.44988	-87.69876	2020
KY-2137	KY511048_01	Rename			Bull Creek 0.0 to 1.9	Mouth to UT	River/Stream	511048	1.90 MILES	2000 5	Kentucky River	Knox	0.00	1.90	36.99001	-83.83068	36.97141	-83.84193	2020
KY-2136	KY511046_01	Rename			Bull Creek 0.0 to 4.2	Mouth to Thousandsticks Branch	River/Stream	511046	4.20 MILES	2010 2	Kentucky River	Leslie	0.00	4.20	37.22048	-83.37595	37.18586	-83.42604	2020
KY-1618	KY511050_01	Rename			Bull Fork 2.5 to 4.7	Swim Branch to UT	River/Stream	511050	2.20 MILES	2006 2	Licking River	Rowan	2.50	4.70	38.18854	-83.52450	38.21298	-83.53978	2020
KY-368	KY488359_01	Rename			Bull Run 0.0 to 3.7	Mouth to Headwaters	River/Stream	488359	3.70 MILES	2006 5	Upper Cumberland River	Knox	0.00	3.70	36.81049	-83.93877	36.84911	-83.93252	2020
KY-369	KY488365-3.4_01	Rename			Bull Run Creek UT 0.1 to 1.0	Above Road Crossing to 0.3 Miles below Impoundment	River/Stream	488365	0.90 MILES	2004 2	Green River	Casey	0.10	1.00	37.36292	-85.02388	37.37117	-85.13034	2020
KY-370	KY488374_01	Rename			Bullit Lick Creek 0.0 to 2.3	Mouth to Gravel Creek	River/Stream	488374	2.30 MILES	2000 5	Salt River	Bullitt	0.00	2.30	37.98016	-85.74675	38.00178	-85.75248	2020
KY-371	KY488379_01	Rename			Bullock Pen Creek 0.0 to 1.5	Mouth to Bullock Pen Lake Dam	River/Stream	488379	1.50 MILES	2006 2	Kentucky River	Boone, Grant	0.00	1.50	37.77060	-84.65935	38.78786	-84.65616	2020
KY-372	KY488380_00	Rename			Bullock Pen Lake	Entire Reservoir	Lake/Reservoir	488380	119 ACRES	2020 5	Kentucky River	Grant			38.78867	-84.65667	38.79951	-84.60995	2020
KY-1619	KY511058_01	Rename			Bullskin Creek 0.0 to 14.7	Mouth to headwaters	River/Stream	511058	14.70 MILES	2010 2	Kentucky River	Clay, Leslie	0.00	14.70	37.27322	-83.64441	37.19870	-83.48494	2020
KY-373	KY488381_01	Rename			Bullskin Creek 0.0 to 3.4	Mouth to 3rd Order Stream	River/Stream	488381	3.40 MILES	2006 2	Salt River	Shelby	0.00	3.40	38.16191	-85.28012	38.18169	-85.26509	2020
KY-374	KY488381_02	Rename			Bullskin Creek 14.4 to 22.45	Lutz Run to Headwaters	River/Stream	488381	8.05 MILES	2012 5	Salt River	Shelby, Henry	14.40	22.45	38.27312	-85.28705	38.35383	-85.21400	2020
KY-3194					Bullskin Creek 3.4 to 14.4	3rd Order Stream to Lutz Run	River/Stream	488381	11.00 MILES	2020 4C	Salt River	Shelby	3.40	14.40	38.18169	-85.26509	38.27312	-85.28705	2020
KY-2138	KY511064_01	Rename			Bunches Creek 0.0 to 3.5	Mouth to Amos Falls Branch/Seminary Branch	River/Stream	511064	3.50 MILES	2006 2	Upper Cumberland River	Whitley	0.00	3.50	36.83363	-84.31828	36.82749	-84.26979	2020
KY-26	KY488447_01	Rename			Burnett Fork 0.0 to 1.25	Mouth to 2nd order UT	River/Stream	488447	1.25 MILES	2002 5	Green River	Daviess	0.00	1.25	37.72099	-87.02080	37.73915	-87.01855	2020
KY-27	KY488450_01	Rename			Burning Fork 0.0 to 3.3	Mouth to Rockhouse Fork	River/Stream	488450	3.30 MILES	2006 5	Licking River	Magoffin	0.00	3.30	37.74892	-83.06870	37.73027	-83.02376	2020
KY-28	KY488450_02	Rename			Burning Fork 3.3 to 5.25	Rockhouse Fork to Arnett Branch	River/Stream	488450	1.95 MILES	2012 5	Licking River	Magoffin	3.30	5.25	37.73027	-83.02376	37.71010	-83.00703	2020
KY-29	KY488498_01	Rename			Butchers Branch 0.0 to 0.25	Mouth to Sunnys Lake	River/Stream	488498	0.25 MILES	2006 2	Ohio River	Hancock	0.00	0.25	37.88324	-86.89596	37.88350	-86.89167	2020
KY-30	KY488498_02	Rename			Butchers Branch 0.25 to 2.4	Sunnys Lake to Headwaters	River/Stream	488498	2.15 MILES	2006 4A	Ohio River	Hancock	0.25	2.40	37.88350	-86.89167	37.89422	-86.86165	2020
KY-375	KY488506-1.3_01	Rename			Butler Branch UT 0.0 to 1.7	Mouth to Headwaters	River/Stream	488506	1.70 MILES	2016 5	Ohio River	Hancock	0.00	1.70	37.13885	-86.29007	37.15948	-86.27642	2020
KY-2139	KY511100_01	Rename			Butler Creek 0.0 to 4.1	Mouth to Contiguous Buffer	River/Stream	511100	4.10 MILES	2014 5	Ohio River	Crittenden	0.00	4.10	37.39178	-88.06477	37.36678	-88.10588	2020
KY-3159					Butler Creek 1.9 to 6.6	Green River Lake Backwaters to Headwaters	River/Stream	488512	4.70 MILES	2020 3	Green River	Adair	1.90	6.60	37.21377	-85.29579	37.16462	-85.26091	2020
KY-376	KY488519_01	Rename			Butlers Fork 2.5 to 4.4	UT to UT	River/Stream	488519	1.90 MILES	2008 5	Green River	Adair	2.50	4.40	37.09404	-85.37666	37.07267	-85.37902	2020
KY-377	KY488566_01	Rename			Cabin Creek 3.45 to 11.3	East Fork Cabin Creek to Highway 10 Bridge	River/Stream	488566	7.85 MILES	2010 5	Ohio River	Lewis	3.45	11.30	38.61107	-83.62476	38.56785	-83.53755	2020
KY-378	KY488575_01	Rename			Caddle Creek 0.0 to 2.05	Mouth to Headwaters	River/Stream	488575	2.05 MILES	2012 5	Kentucky River	Estill	0.00	2.05	37.79557	-84.01557	37.80279	-83.98946	2020
KY-2919					Cadiz Spring	Entire Springshed	Spring	90000654	5985 ACRES	2020 5	Lower Cumberland River	Trigg			36.86168	-87.83640	36.89575	-87.76691	2020
KY-379	KY488592_01	Rename			Caldwell Creek 0.0 to 2.95	Mouth to UT	River/Stream	488592	2.95 MILES	2000 5	Mississippi River	Graves	0.00	2.95	36.55225	-88.52695	36.53141	-88.56242	2020
KY-380	KY488598_01	Rename			Caleb Fork 0.0 to 1.25	Mouth to Confluence with Johns Fork and Elisha Fork	River/Stream	488598	1.25 MILES	2010 5	Big Sandy River	Floyd	0.00	1.25	37.33037	-82.69088	37.31513	-82.68282	2020
KY-2140	KY511128_01	Rename			Calf Pen Fork 0.0 to 3.8	Mouth to Headwaters	River/Stream	511128	3.80 MILES	2006 2	Upper Cumberland River	Whitley	0.00	3.80	36.82933	-84.28314	36.79268	-84.26809	2020
KY-381	KY488609_01	Rename			Calhoun Creek 0.0 to 2.8	Mouth to Mason Creek	River/Stream	488609	2.80 MILES	2004 5	Green River	Muhlenberg	0.00	2.80	37.25437	-86.97978	37.27970	-86.94667	2020
KY-3239					Calvert Spring	Entire Springshed of Calvert Spring	Spring	90000461	3663 ACRES	2020 3	Green River	Allen			36.69673	-86.07477	36.72364	-86.04977	2020
KY-2141	KY511145_01	Rename			Camp Branch 0.0 to 1.1	Mouth to Headwaters	River/Stream	511145	1.10 MILES	2016 2	Kentucky River	Menifee	0.00	1.10	37.88067	-83.70589	37.89393	-83.69860	2020
KY-3273					Camp Creek 0.0 to 1.8	Mouth to unnamed tributary	River/Stream	488687	1.80 MILES	2020 2	Tennessee River	Marshall	0.00	1.80	37.03591	-88.37430	37.02152	-88.37081	2020
KY-382	KY488685_01	Rename			Camp Creek 0.0 to 5.55	Mouth to South Fork of Camp Creek	River/Stream	488685	5.55 MILES	2002 5	Tennessee River	McCracken	0.00	5.55	36.96252	-88.53232	36.94262	-88.60605	2020
KY-2142	KY511150_01	Rename			Camp Creek 0.35 to 4.95	Mouth (Ohio River) to UT	River/Stream	511150	4.60 MILES	2014 5	Ohio River	Crittenden	0.35	4.95	37.47213	-88.07635	37.43475	-88.10395	2020
KY-383	KY488685_02	Rename			Camp Creek 5.55 to 9.65	South Fork Camp Creek to Headwaters	River/Stream	488685	4.10 MILES	2012 4A	Tennessee River	McCracken, Graves	5.55	9.65	36.94262	-88.60605	36.95595	-88.67297	2020
KY-2143	KY511157_01	Rename			Campbell Branch 0.0 to 2.1	Mouth to Headwaters	River/Stream	511157	2.10 MILES	2002 2	Upper Cumberland River	Whitley	0.00	2.10	36.64277	-84.24080	36.66625	-84.22370	2020
KY-2052	KY509444_00	Rename			Campbell County Lake (aka A.J. Jolly Lake)	Entire Reservoir	Lake/Reservoir	509444	153 ACRES	2020 2	Licking River	Campbell			38.87758	-84.38621	38.88974	-84.35798	2020
KY-54	KY2742651_00	Rename			Campbellsville City Reservoir	Dam to Upper Lake	Lake/Reservoir	2742651	62 ACRES	2020 5	Green River	Taylor			37.35572	-85.34267	37.36326	-85.33215	2020
KY-2144	KY511173_00	Rename			Campton Lake	Dam to Lake boundary	Lake/Reservoir	511173	20 ACRES	2020 2	Kentucky River	Wolfe			37.74486	-83.54693	37.74611	-83.53803	2020
KY-2145	KY511181_01	Rename			Cane Branch 0.0 to 2.0	Mouth to Headwaters	River/Stream	511181	2.00 MILES	2006 4A	Upper Cumberland River	McCreary	0.00	2.00	36.87635	-84.46035	36.85937	-84.43576	2020
KY-2146	KY511185_01	Rename			Cane Creek 0.0 to 1.5	Cumberland River to Headwaters	River/Stream	511185	1.50 MILES	2002 2	Upper Cumberland River	Whitley	0.00	1.50	36.76198	-84.30339	36.77720	-84.31654	2020
KY-2149	KY511189_01	Rename			Cane Creek 0.0 to 11.9	Mouth to Headwaters	River/Stream	511189	11.90 MILES	2006 2	Upper Cumberland River	Laurel	0.00	11.90	37.02652	-84.30897	37.05640	-84.17708	2020
KY-2148	KY511187_01	Rename			Cane Creek 0.0 to 3.4	Mouth to Right Fork Cane Creek and Lower Cane Creek	River/Stream	511187	3.40 MILES	2000 4A	Kentucky River	Powell	0.00	3.40	37.83318	-83.79826	37.85871	-83.77502	2020
KY-388	KY488773_01	Rename			Cane Creek 0.0 to 4.3	Mouth to Turkey Lick	River/Stream	488773	4.30 MILES	2004 5	Little Sandy River	Greenup	0.00	4.30	38.44177	-82.86128	38.41496	-82.84490	2020
KY-2147	KY511184_01	Rename			Cane Creek 0.0 to 4.4	Mouth to UT	River/Stream	511184	4.40 MILES	2006 5	Upper Cumberland River	Whitley	0.00	4.40	36.66945	-84.13968	36.66702	-84.20604	2020
KY-386	KY488771_01	Rename			Cane Creek 0.0 to 4.4	Mouth to Headwaters	River/Stream	488771	4.40 MILES	2008 5	Mississippi River	Hickman	0.00	4.40	36.69518	-89.07045	36.69278	-89.01981	2020
KY-384	KY488768_01	Rename			Cane Creek 0.0 to 5.4	Mouth to Pond Branch	River/Stream	488768	5.40 MILES	2006 5	Mississippi River	Graves	0.00	5.40	36.62390	-88.98246	36.59422	-88.89874	2020
KY-2151	KY511190_01	Rename			Cane Creek 0.0 to 9.7	Mouth to UT	River/Stream	511190	9.70 MILES	2000 4A	Kentucky River	Breathitt	0.00	9.70	37.56777	-83.40217	37.47486	-83.42318	2020
KY-387	KY488772_01	Rename			Cane Creek 1.05 to 4.2	Upstream wetlands to UT	River/Stream	488772	3.15 MILES	2008 5	Mississippi River	Ballard	1.05	4.20	37.01272	-89.08683	36.99180	-89.05001	2020
KY-385	KY488770_01	Rename			Cane Creek 3.2 to 4.15	Lake to Wingo POTW	River/Stream	488770	0.95 MILES	2008 5	Mississippi River	Graves	3.20	4.15	36.65448	-88.75553	36.64917	-88.74056	2020
KY-2150	KY511189-10.6_01	Rename			Cane Creek UT 0.0 to 1.2	Mouth to Headwaters	River/Stream	511189	1.20 MILES	2012 2	Upper Cumberland River	Laurel	0.00	1.20	37.05160	-84.19763	37.06649	-84.18907	2020
KY-398	KY488799_01	Rename			Cane Run 0.0 to 3.0	Mouth to US 62	River/Stream	488799	3.00 MILES	2010 5	Kentucky River	Scott	0.00	3.00	38.21086	-84.61333	38.18660	-84.56635	2020
KY-389	KY488786_01	Rename			Cane Run 0.0 to 3.5	Mouth to Headwaters	River/Stream	488786	3.50 MILES	1998 4A	Tradewater River	Hopkins	0.00	3.50	37.18122	-87.58066	37.20864	-87.55744	2020
KY-392	KY488791_01	Rename			Cane Run 0.0 to 3.75	Mouth to Headwaters	River/Stream	488791	3.75 MILES	2002 5	Green River	Daviess	0.00	3.75	37.64117	-86.97263	37.67524	-86.92992	2020
KY-393	KY488794_01	Rename			Cane Run 0.0 to 7.3	From Mouth to Pond	River/Stream	488794	7.30 MILES	2012 4A	Salt River	Shelby, Jefferson	0.00	7.30	38.15244	-85.49511	38.18109	-85.38710	2020
KY-390	KY488787_01	Rename			Cane Run 0.9 to 6.5	Nolin Lake backwaters to headwaters	River/Stream	488787	5.60 MILES	2006 2	Green River	Hart	0.90	6.50	37.33389	-86.06971	37.28890	-86.01988	2020
KY-399	KY488799_02	Rename			Cane Run 3.0 to 9.45	US Hwy 62 to UT	River/Stream	488799	6.45 MILES	2010 5	Kentucky River	Fayette, Scott	3.00	9.45	38.18960	-84.58953	38.14391	-84.51942	2020
KY-394	KY488798_01	Rename			Cane Run 3.1 to 5.2	UT/Influence of Dix River to UT with Package Plant	River/Stream	488798	2.10 MILES	2016 4A	Kentucky River	Mercer	3.10	5.20	37.75419	-84.74037	37.75320	-84.76266	2020
KY-397	KY488798_02	Rename			Cane Run 5.2 to 6.35	UT with Package Plant to Pond	River/Stream	488798	1.15 MILES	2016 5	Kentucky River	Mercer	5.20	6.35	37.75320	-84.76266	37.77426	-84.77679	2020
KY-400	KY488799_03	Rename			Cane Run 9.45 to 17.4	UT to Headwaters	River/Stream	488799	7.95 MILES	2010 5	Kentucky River	Fayette	9.45	17.40	38.14391	-84.51942	38.06122	-84.46340	2020
[illegible]	KY488798-5.2_01	Rename			Cane Run UT 0.0 to 0.07	Mouth to Headwaters	River/Stream	488798	0.07 MILES	2016 5	Kentucky River	Mercer	0.00	0.07	37.75320	-84.76266	37.75284	-84.76261	2020
KY-403	KY488799-15.8_01	Rename			Cane Run UT 0.0 to 0.9	Mouth to Headwaters	River/Stream	488799	0.90 MILES	2014 4A	Kentucky River	Fayette	0.00	0.90	38.07585	-84.48664	38.06414	-84.48740	2020
KY-395	KY488798-3.1_01	Rename			Cane Run UT 0.0 to 1.3	Mouth to Impoundment	River/Stream	488798	1.30 MILES	2016 4A	Kentucky River	Mercer	0.00	1.30	37.75419	-84.74036	37.76387	-84.75709	2020
KY-402	KY488799-12.9_01	Rename			Cane Run UT 0.0 to 2.15	Mouth to Headwaters	River/Stream	488799	2.15 MILES	2010 5	Kentucky River	Fayette	0.00	2.15	38.10596	-84.49908	38.08593	-84.47656	2020
KY-401	KY488799-10.7_01	Rename			Cane Run UT 0.0 to 2.4	Mouth to Confluence with 2nd order Unnamed Tributary	River/Stream	488799	2.40 MILES	2010 5	Kentucky River	Fayette	0.00	2.40	38.13169	-84.51031	38.11414	-84.48364	2020
KY-396	KY488798-4.2_01	Rename			Cane Run UT 0.0 to 3.5	Mouth to Headwaters	River/Stream	488798	3.50 MILES	2016 4A	Kentucky River	Mercer	0.00	3.50	37.74701	-84.75012	37.73273	-84.78799	2020
KY-404	KY488799-6.13_01	Rename			Cane Run UT 0.0 to 3.6	Mouth to Headwaters	River/Stream	488799	3.60 MILES	2010 5	Kentucky River	Fayette, Scott	0.00	3.60	38.16666	-84.55248	38.12968	-84.55313	2020
KY-405	KY488826_01	Rename			Caney Creek 0.0 to 0.6	Mouth to Headwaters	River/Stream	488826	0.60 MILES	2002 2	Upper Cumberland River	Bell	0.00	0.60	36.81124	-83.64633	36.81777	-83.65353	2020
KY-408	KY488831_01	Rename			Caney Creek 0.0 to 1.5	Mouth to Discharge (Newsome Building)	River/Stream	488831	1.50 MILES	2010 3	Big Sandy River	Pike	0.00	1.50	37.36027	-82.55608	37.34246	-82.54824	2020
KY-415	KY488843_01	Rename			Caney Creek 0.0 to 1.5	Mouth to Dickey Fork	River/Stream	488843	1.50 MILES	2004 5	Kentucky River	Owen	0.00	1.50	38.47164	-84.69272	38.46336	-84.70640	2020
KY-407	KY488830_01	Rename			Caney Creek 0.0 to 3.3	Mouth to Briarfield Branch	River/Stream	488830	3.30 MILES	2004 5	Tradewater River	Caldwell	0.00	3.30	37.23503	-87.89830	37.20398	-87.88592	2020
KY-411	KY488838_01	Rename			Caney Creek 0.0 to 3.6	Mouth to Greenville STP Outfall	River/Stream	488838	3.60 MILES	2016 5	Green River	Muhlenberg	0.00	3.60	37.20962	-87.10736	37.22040	-87.16798	2020
KY-2152	KY511201_01	Rename			Caney Creek 0.0 to 4.4	Mouth to Little Caney Creek	River/Stream	511201	4.40 MILES	2000 5	Licking River	Morgan	0.00	4.40	37.93625	-83.31072	37.89753	-83.29099	2020
KY-416	KY488846_01	Rename			Caney Creek 0.0 to 6.8	Mouth to Horse Branch	River/Stream	488846	6.80 MILES	2020 5	Green River	Ohio	0.00	6.80	37.54462	-86.69807	37.47100	-86.65964	2020
KY-410	KY488837_01	Rename			Caney Creek 0.0 to 8.2	Mouth to UT	River/Stream	488837	8.20 MILES	2008 5	Tradewater River	Hopkins	0.00	8.20	37.16243	-87.66394	37.18052	-87.55732	2020
KY-406	KY488828_01	Rename			Caney Creek 1.4 to 5.25	HWY 171 to County Line	River/Stream	488828	3.85 MILES	1998 3	Green River	Muhlenberg	1.40	5.25	37.05029	-87.23112	37.04288	-87.17598	2020
KY-409	KY488831_02	Rename			Caney Creek 1.5 to 4.0	Discharge (Newsome building) to Left Fork Caney Creek Confluence	River/Stream	488831	2.50 MILES	2016 5	Big Sandy River	Pike	1.50	4.00	37.34246	-82.54824	37.31605	-82.54910	2020
KY-418	KY488846_03	Rename			Caney Creek 10.05 to 14.0	Richland Creek to Dog Creek	River/Stream	488846	3.95 MILES	2004 2	Green River	Ohio, Grayson	10.05	14.00	37.43686	-86.63234	37.41925	-86.57371	2020
KY-412	KY488838_02	Rename			Caney Creek 3.6 to 7.65	Greenville STP outfall to Headwaters	River/Stream	488838	4.05 MILES	2016 5	Green River	Muhlenberg	3.60	7.65	37.22040	-87.16799	37.21893	-87.22814	2020
KY-417	KY488846_02	Rename			Caney Creek 6.8 to 10.05	Horse Branch to Richland Creek	River/Stream	488846	3.25 MILES	2016 5	Green River	Ohio	6.80	10.05	37.47100	-86.65964	37.43686	-86.63234	2020
KY-413	KY488838-1.8_01	Rename			Caney Creek UT 0.0 to 2.35	Mouth to Headwaters	River/Stream	488838	2.35 MILES	2016 5	Green River	Muhlenberg	0.00	2.35	37.21085	-87.13928	37.18551	-87.15717	2020
KY-414	KY488838-2.3_01	Rename			Caney Creek UT 0.0 to 2.6	Mouth to Headwaters	River/Stream	488838	2.60 MILES	2016 5	Green River	Muhlenberg	0.00	2.60	37.21479	-87.14668	37.19305	-87.17716	2020
KY-424	KY488864_01	Rename			Caney Fork 0.0 to 4.0	From Mouth to Headwaters	River/Stream	488864	4.00 MILES	2012 5	Salt River	Nelson	0.00	4.00	37.87613	-85.43433	37.83081	-85.41693	2020
KY-425	KY488866_01	Rename			Caney Fork 0.0 to 6.7	Mouth to Headwaters	River/Stream	488866	6.70 MILES	2020 4C	Green River	Barren	0.00	6.70	36.84608	-85.97090	36.83351	-85.87195	2020
KY-421	KY488862_01	Rename			Caney Fork 0.0 to 7.5	Mouth to Hollybush Creek	River/Stream	488862	7.50 MILES	2010 5	Big Sandy River	Knott	0.00	7.50	37.41737	-82.79738	37.35237	-82.85776	2020
KY-419	KY488857_01	Rename			Caney Fork 0.9 to 3.5	Green Branch to Headwaters	River/Stream	488857	2.60 MILES	2004 2	Little Sandy River	Lawrence	0.90	3.50	38.16915	-82.86467	38.16761	-82.82422	2020
KY-423	KY488863_01	Rename			Caney Fork 3.5 to 7.95	Bishop Ditch to UT	River/Stream	488863	4.45 MILES	2004 5	Tradewater River	Webster	3.50	7.95	37.50594	-87.84386	37.55940	-87.82020	2020
KY-422	KY488862_02	Rename			Caney Fork 7.5 to 11.6	Hollybush Creek to Headwaters	River/Stream	488862	4.10 MILES	2016 5	Big Sandy River	Knott	7.50	11.60	37.35237	-82.85776	37.31837	-82.90306	2020
KY-420	KY488861-4.2_01	Rename			Caney Fork UT 0.0 to 1.4	Mouth to Headwaters	River/Stream	488861	1.40 MILES	2014 5	Green River	Casey	0.00	1.40	37.35874	-84.98975	37.37773	-84.99015	2020
KY-426	KY488877_00	Rename			Caneyville Reservoir	Entire Reservoir	Lake/Reservoir	488877	69 ACRES	1992 5	Green River	Grayson			37.43892	-86.46421	37.44891	-86.45670	2020
KY-427	KY488885_01	Rename			Cannon Creek 0.0 to 1.8	Mouth to Moore Branch	River/Stream	488885	1.80 MILES	2008 5	Upper Cumberland River	Bell	0.00	1.80	36.70280	-83.66596	36.69684	-83.68446	2020
KY-428	KY488885_02	Rename			Cannon Creek 5.1 to 6.7	Lake Backwaters to Headwaters	River/Stream	488885	1.60 MILES	2002 2	Upper Cumberland River	Bell	5.10	6.70	36.67978	-83.72075	36.67099	-83.74478	2020
KY-429	KY488886_00	Rename			Cannon Creek Lake	Dam to lake boundary	Lake/Reservoir	488886	224 ACRES	2020 2	Upper Cumberland River	Bell			36.68471	-83.69184	36.67978	-83.72075	2020
KY-2153	KY511207_01	Rename			Canoe Creek 0.0 to 0.5	Mouth to Confluence with Little Fork Canoe Creek	River/Stream	511207	0.50 MILES	2006 2	Kentucky River	Breathitt	0.00	0.50	37.44519	-83.45560	37.44904	-83.44872	2020
KY-430	KY488897_01	Rename			Canoe Creek 0.0 to 3.95	Backwater of Ohio River to Wilson Creek	River/Stream	488897	3.95 MILES	2020 5	Ohio River	Henderson	0.00	3.95	37.81642	-87.63583	37.79839	-87.62167	2020
KY-432	KY488897_03	Rename			Canoe Creek 14.6 to 23.95	Sellers Ditch to Headwaters	River/Stream	488897	9.35 MILES	2014 5	Ohio River	Henderson	14.60	23.95	37.79338	-87.59420	37.66762	-87.56549	2020
KY-431	KY488897_02	Rename			Canoe Creek 3.95 to 14.5	Wilson Creek to Sellers Ditch	River/Stream	488897	10.55 MILES	2014 5	Ohio River	Henderson	3.95	14.50	37.79839	-87.62167	37.79431	-87.59470	2020
KY-433	KY488897-19.8_01	Rename			Canoe Creek UT 0.0 to 1.0	UT of UT of Canoe Creek to UT of UT of Canoe Creek	River/Stream	488897	1.00 MILES	2014 5	Ohio River	Henderson	0.00	1.00	37.72325	-87.56449	37.71260	-87.55575	2020
KY-434	KY488910_00	Rename			Cap Mauzy Lake	Entire Reservoir	Lake/Reservoir	488910	80 ACRES	2020 2	Ohio River	Union			37.62279	-87.85515	37.44891	-86.45670	2020
KY-11	KY1305682_01	Rename			Capuchin Creek 0.0 to 1.2	Mouth to KY/TN State Line	River/Stream	1305682	1.20 MILES	2008 2	Upper Cumberland River	McCreary, Whitley	0.00	1.20	36.60511	-84.23499	36.59205	-84.22764	2020
KY-435	KY488944-2.5_01	Rename			Carmon Creek UT 0.0 to 1.9	Mouth to Campbellsburg WWTP Outfall	River/Stream	488944	1.90 MILES	2006 3	Salt River	Henry, Trimble	0.00	1.90	38.54389	-85.23761	38.53013	-85.20971	2020
KY-436	KY488966_00	Rename			Carpenters Lake	Dam to Lake boundary	Lake/Reservoir	488966	69 ACRES	2020 5	Ohio River	Daviess			37.84303	-86.98055	37.84965	-86.97450	2020
KY-2154	KY511230_01	Rename			Carr Fork 0.0 to 5.9	Mouth to Point of Discharge	River/Stream	511230	5.90 MILES	2006 4A	Kentucky River	Perry	0.00	5.90	37.20566	-83.13193	37.21404	-83.06682	2020
KY-2156	KY511230_03	Rename			Carr Fork 15.6 to 26.5	Shingle Branch to UT	River/Stream	511230	10.90 MILES	2010 5	Kentucky River	Knott	15.60	26.50	37.23708	-82.95460	37.27845	-82.81943	2020
KY-2155	KY511230_02	Rename			Carr Fork 5.9 to 8.8	below Montgomery Creek to base of dam spillway	River/Stream	511230	2.90 MILES	2010 5	Kentucky River	Perry, Knott	5.90	8.80	37.21404	-83.06682	37.23088	-83.03329	2020
KY-437	KY488975_00	Rename			Carr Fork Lake	Dam to Headwaters	Lake/Reservoir	488975	547 ACRES	2020 5	Kentucky River	Knott			37.22953	-83.03291	37.23959	-82.94828	2020
KY-438	KY489022_01	Rename			Carters Creek 0.0 to 3.1	Mouth to Headwaters	River/Stream	489022	3.10 MILES	2016 5	Green River	Muhlenberg	0.00	3.10	37.13318	-87.11265	37.10992	-87.14465	2020
KY-439	KY489030_01	Rename			Cartwright Creek 0.0 to 6.6	Mouth to Road Run Confluence	River/Stream	489030	6.60 MILES	2020 5	Salt River	Washington	0.00	6.60	37.75898	-85.35030	37.74922	-85.26487	2020
KY-441	KY489030_03	Rename			Cartwright Creek 12.7 to 15.3	Allen Branch Confluence to Shepherds Run Confluence	River/Stream	489030	2.60 MILES	2012 5	Salt River	Washington	12.70	15.30	37.68934	-85.26189	37.66977	-85.28352	2020
KY-440	KY489030_02	Rename			Cartwright Creek 6.6 to 12.7	Road Run to Allen Branch	River/Stream	489030	6.10 MILES	2010 2	Salt River	Washington	6.60	12.70	37.74922	-85.26487	37.68934	-85.26189	2020
KY-3195					Cartwright Creek UT 0.0 to 2.0	Mouth to Headwaters	River/Stream	489030	2.00 MILES	2020 4C	Salt River	Marion	0.00	2.00	37.59142	-85.20424	37.61265	-85.18610	2020
KY-442	KY489043_01	Rename			Casey Creek 0.0 to 3.6	Mouth to Skinner Creek	River/Stream	489043	3.60 MILES	2020 5	Lower Cumberland River	Trigg	0.00	3.60	36.77793	-87.72181	36.74371	-87.74080	2020
KY-443	KY489044_01	Rename			Casey Creek 0.0 to 4.5	Mouth to 2nd or less UT	River/Stream	489044	4.50 MILES	2014 5	Ohio River	Union	0.00	4.50	37.71958	-87.75481	37.67405	-87.80922	2020
KY-111	KY485672_03	Rename			Casey Creek 19.2 to 21.7	Casey Fork to below Pipeline	River/Stream	485672	2.50 MILES	2008 2	Green River	Casey	19.20	21.70	37.35112	-85.01936	37.38127	-85.01415	2020
KY-109	KY485672_01	Rename			Casey Creek 2.75 to 4.7	Green River Lake to Crooked Creek	River/Stream	485672	1.95 MILES	2020 2C	Green River	Adair	2.75	4.70	37.21574	-85.20210	37.23427	-85.18374	2020
KY-2901					Casey Creek 3.6 to 10.5	Skinner Creek to Headwaters	River/Stream	489043	6.90 MILES	2020 3	Lower Cumberland River	Trigg	3.60	10.50	36.74371	-87.74080	36.67631	-87.68779	2020
KY-3160					Casey Creek 4.7 to 8.1	Crooked Creek to Dry Creek	River/Stream	485672	3.40 MILES	2020 4C	Green River	Adair	4.70	8.10	37.23427	-85.18374	37.26615	-85.14952	2020
KY-110	KY485672_02	Rename			Casey Creek 8.1 to 12.2	Dry Creek to Woods Creek	River/Stream	485672	4.10 MILES	2008 2	Green River	Casey, Adair	8.10	12.20	37.26616	-85.14951	37.29428	-85.09858	2020
KY-444	KY489048_01	Rename			Casey Fork 0.0 to 2.1	Mouth to below Wisdom Creek	River/Stream	489048	2.10 MILES	2000 2	Upper Cumberland River	Cumberland	0.00	2.10	36.83134	-85.49258	36.85715	-85.50014	2020
KY-445	KY489056_01	Rename			Cash Creek 0.0 to 6.15	Mouth to UT	River/Stream	489056	6.15 MILES	2004 5	Green River	Henderson	0.00	6.15	37.71295	-87.39442	37.70144	-87.45058	2020
KY-446	KY489059_01	Rename			Caskey Fork 0.0 to 2.35	Mouth to Nickell Fork	River/Stream	489059	2.35 MILES	2006 5	Licking River	Morgan	0.00	2.35	37.85766	-83.37018	37.83163	-83.38347	2020
KY-447	KY489064_01	Rename			Cassidy Creek 0.0 to 4.15	Mouth to Headwaters	River/Stream	489064	4.15 MILES	2002 4A	Licking River	Fleming	0.00	4.15	38.38028	-83.74574	38.42488	-83.78079	2020
KY-448	KY489074_01	Rename			Castleberry Creek 0.0 to 2.1	Mouth to Morgan Creek	River/Stream	489074	2.10 MILES	2004 5	Tradewater River	Christian	0.00	2.10	37.09423	-87.59793	37.08557	-87.58045	2020
KY-2157	KY511245_01	Rename			Cat Creek 0.0 to 7.8	Mouth to Headwaters	River/Stream	511245	7.80 MILES	2006 5	Kentucky River	Powell	0.00	7.80	37.83937	-83.80807	37.76639	-83.82760	2020
KY-449	KY489084_01	Rename			Cat Fork 0.0 to 2.85	Blaine Creek to Little Cat Fork	River/Stream	489084	2.85 MILES	2010 2	Big Sandy River	Lawrence	0.00	2.85	38.18256	-82.68295	38.17937	-82.71203	2020
KY-451	KY489084_03	Rename			Cat Fork 11.1 to 13.05	Brammer Branch to Headwaters	River/Stream	489084	1.95 MILES	2016 5	Big Sandy River	Lawrence	11.10	13.05	38.15659	-82.79668	38.13286	-82.80631	2020
KY-450	KY489084_02	Rename			Cat Fork 2.85 to 7.0	Little Cat Fork to Cooksey Fork	River/Stream	489084	4.15 MILES	2010 2	Big Sandy River	Lawrence	2.85	7.00	38.17937	-82.71203	38.15746	-82.74491	2020
KY-452	KY489099_01	Rename			Catron Creek 0.0 to 8.9	Little Creek to Headwaters	River/Stream	489099	8.90 MILES	2012 5	Upper Cumberland River	Harlan	0.00	8.90	36.82971	-83.32584	36.73461	-83.37817	2020
KY-2158	KY511256_01	Rename			Cavanaugh Creek 0.0 to 8.6	Mouth to Headwaters	River/Stream	511256	8.60 MILES	2010 2	Kentucky River	Jackson	0.00	8.60	37.55370	-83.94222	37.49883	-84.01118	2020
KY-2159	KY511277_00	Rename			Cave Run Lake	Entire Reservoir	Lake/Reservoir	511277	8097 ACRES	2020 5	Licking River	Rowan, Morgan, Menifee, Bath			38.11760	-83.53235	37.93261	-83.32633	2020
KY-2160	KY511284-1.7_01	Rename			Caves Fork UT 0.0 to 1.15	Mouth to Headwaters	River/Stream	511284	1.15 MILES	2016 2	Kentucky River	Lee	0.00	1.15	37.66717	-83.70598	37.68308	-83.70282	2020
KY-2161	KY511286-0.2_01	Rename			Cawood Branch UT 0.0 to 1.45	Mouth to Headwaters	River/Stream	511286	1.45 MILES	2006 2	Kentucky River	Leslie	0.00	1.45	36.93676	-83.37275	36.95452	-83.36007	2020
KY-2673	KY90001143_00	Rename			Cedar Cove Spring	Entire Springshed of Cedar Cove Spring	Spring	90001143	3463 ACRES	2020 3	Kentucky River	Woodford, Franklin			38.21889	-84.84167	38.15280	-84.81596	2020
KY-453	KY489179_01	Rename			Cedar Creek 0.0 to 0.5	Mouth to Cedar Creek Dam	River/Stream	489179	0.50 MILES	2010 4C	Kentucky River	Lincoln	0.00	0.50	37.50122	-84.54714	37.49536	-84.55073	2020
KY-455	KY489182_01	Rename			Cedar Creek 0.0 to 1.7	Mouth to North Branch Cedar Creek	River/Stream	489182	1.70 MILES	2006 2	Licking River	Robertson	0.00	1.70	38.47622	-84.12334	38.49051	-84.10732	2020
KY-454	KY489181_01	Rename			Cedar Creek 0.0 to 5.25	Mouth to Greens Branch Confluence	River/Stream	489181	5.25 MILES	2020 2	Salt River	Bullitt	0.00	5.25	38.00230	-85.66310	37.98224	-85.60071	2020
KY-459	KY489184_01	Rename			Cedar Creek 0.0 to 9.0	Mouth to Forested Area	River/Stream	489184	9.00 MILES	2020 4C	Kentucky River	Owen	0.00	9.00	38.41821	-84.87969	38.36963	-84.79337	2020
KY-457	KY489183_02	Rename			Cedar Creek 12.1 to 16.1	Cedar Creek WWTP to Headwaters	River/Stream	489183	4.00 MILES	2014 5	Salt River	Jefferson	12.10	16.10	38.11850	-85.59451	38.16030	-85.57059	2020
KY-456	KY489183_01	Rename			Cedar Creek 4.3 to 12.1	Pennsylvania Run to Cedar Creek WWTP Outfall	River/Stream	489183	7.80 MILES	2014 5	Salt River	Jefferson, Bullitt	4.30	12.10	38.06551	-85.64718	38.11850	-85.59451	2020
KY-59	KYCLN211_00	Rename			Cedar Creek Lake	Dam to Lake Boundaries	Lake/Reservoir	2788037	778 ACRES	2020 5	Kentucky River	Lincoln			37.49536	-84.55074	37.44922	-84.54712	2020
KY-458	KY489183-6.2_01	Rename			Cedar Creek UT 0.0 to 0.15	Mouth to WWTP Discharge	River/Stream	489183	0.15 MILES	2012 3	Salt River	Bullitt	0.00	0.15	38.06047	-85.62851	38.05868	-85.62775	2020
KY-460	KY489184-9.15_01	Rename			Cedar Creek UT 0.0 to 1.4	Mouth to Headwaters	River/Stream	489184	1.40 MILES	2006 2	Kentucky River	Owen	0.00	1.40	38.37196	-84.79664	38.38013	-84.77547	2020
KY-461	KY489283_01	Rename			Central Creek 0.8 to 2.8	Urban Area to Headwaters	River/Stream	489283	2.00 MILES	2002 4A	Mississippi River	Carlisle	0.80	2.80	36.86948	-89.01106	36.84451	-89.01750	2020
KY-462	KY489323_01	Rename			Chambers Fork 0.7 to 1.1	Mouth to Land Use Change	River/Stream	489323	0.40 MILES	2004 5	Kentucky River	Wolfe	0.70	1.10	37.70596	-83.48024	37.70150	-83.48441	2020
KY-463	KY489324_01	Rename			Champion Creek 0.0 to 1.5	Mouth to UT	River/Stream	489324	1.50 MILES	2002 5	Tennessee River	McCracken	0.00	1.50	37.01920	-88.60359	37.01839	-88.62761	2020
KY-464	KY489350_01	Rename			Chaplin River 0.0 to 23.15	Mouth to Beaver Creek	River/Stream	489350	23.15 MILES	2020 4A	Salt River	Nelson, Washington	0.00	23.15	37.84379	-85.27846	37.88975	-85.15117	2020
KY-465	KY489350_02	Rename			Chaplin River 32.6 to 32.8	0.6 miles above Sulphur Creek to 0.8 Miles above Sulphur Creek	River/Stream	489350	0.20 MILES	2002 2	Salt River	Washington	32.60	32.80	37.87530	-85.09426	37.87672	-85.09155	2020
KY-466	KY489350_03	Rename			Chaplin River 40.9 to 54.2	Thompson Creek to Cornishville, KY	River/Stream	489350	13.30 MILES	2020 2	Salt River	Washington, Mercer	40.90	54.20	37.85567	-85.03830	37.80423	-84.98705	2020
KY-31	KY489350_04	Rename			Chaplin River 64.1 to 71.05	Deep Creek to Dry Fork	River/Stream	489350	6.95 MILES	2002 5	Salt River	Mercer	64.10	71.05	37.75941	-84.98064	37.72040	-84.94737	2020
KY-32	KY489350_05	Rename			Chaplin River 71.05 to 79.45	Dry Fork to Doctors Fork	River/Stream	489350	8.40 MILES	2002 2	Salt River	Boyle, Mercer	71.05	79.45	37.72040	-84.94737	37.67567	-84.96085	2020
KY-3294					Chaplin River 79.45 to 81.75	Doctors Fork to Danville - Perryville WWTP	River/Stream	489350	2.30 MILES	2020 2	Salt River	Boyle	79.45	81.75	37.67567	-84.96085	37.66262	-84.94165	2020
KY-467	KY489380_01	Rename			Cheese Lick 1.45 to 5.2	Confluence with Log Lick to Confluence with UT Cheese Lick	River/Stream	489380	3.75 MILES	2016 5	Salt River	Mercer, Anderson	1.45	5.20	37.89255	-85.00638	37.92012	-84.97727	2020
KY-468	KY489380_02	Rename			Cheese Lick 5.2 to 8.2	Confluence with UT Cheese Lick to Headwaters	River/Stream	489380	3.00 MILES	2016 5	Salt River	Anderson, Mercer	5.20	8.20	37.92010	-84.97773	37.95342	-84.95284	2020
KY-469	KY489380-5.2_01	Rename			Cheese Lick UT 0.0 to 1.55	Mouth to Headwaters	River/Stream	489380	1.55 MILES	2016 5	Salt River	Mercer	0.00	1.55	37.92012	-84.97727	37.93047	-84.95391	2020
KY-470	KY489388_00	Rename			Chenoa Lake	Dam to Lake Boundary	Lake/Reservoir	489388	34 ACRES	2020 2	Upper Cumberland River	Bell			36.67758	-83.84938	36.67294	-83.85588	2020
KY-473	KY489392_01	Rename			Chenoweth Run (Upper) 0.0 to 4.05	Mouth to Headwaters	River/Stream	489392	4.05 MILES	2014 5	Salt River	Jefferson	0.00	4.05	38.24655	-85.47363	38.25230	-85.52707	2020
KY-471	KY489391_01	Rename			Chenoweth Run 0.0 to 5.2	Mouth to UT (historic POTW outfall now inactive)	River/Stream	489391	5.20 MILES	2012 4A	Salt River	Jefferson	0.00	5.20	38.13096	-85.52637	38.19269	-85.55492	2020
KY-472	KY489391_02	Rename			Chenoweth Run 5.2 to 9.2	UT (historic POTW outfall now inactive) to headwaters	River/Stream	489391	4.00 MILES	2002 4A	Salt River	Jefferson	5.20	9.20	38.19269	-85.55492	38.22906	-85.54206	2020
KY-2698	KYDOW016_00	Rename			Cherokee Park Lake (aka Willow Pond)	Entire Pond	Lake/Reservoir	481	3 ACRES	2006 2	Salt River	Jefferson			38.24474	-85.70054	38.24339	-85.70371	2020
KY-2162	KY511324_01	Rename			Chester Creek 0.0 to 2.85	Mouth to Headwaters	River/Stream	511324	2.85 MILES	2010 2	Kentucky River	Wolfe	0.00	2.85	37.72746	-83.65906	37.71460	-83.70230	2020
KY-474	KY489424_01	Rename			Chestnut Creek 0.0 to 3.0	Mouth to Reservoir Dam	River/Stream	489424	3.00 MILES	2020 5	Tennessee River	Marshall	0.00	3.00	36.90488	-88.39530	36.91885	-88.35618	2020
KY-475	KY489424_02	Rename			Chestnut Creek 3.2 to 5.05	Impoundment to Headwaters	River/Stream	489424	1.85 MILES	2020 5	Tennessee River	Marshall	3.20	5.05	36.91843	-88.35299	36.90634	-88.32900	2020
KY-477	KY489424-2.8_01	Rename			Chestnut Creek UT 0.0 to 0.7	Mouth to Headwaters (Discharges)	River/Stream	489424	0.70 MILES	2016 4A	Tennessee River	Marshall	0.00	0.70	36.92043	-88.35941	36.92553	-88.34930	2020
KY-3290					Chestnut Creek UT 0.0 to 1.45	Mouth to headwaters	River/Stream	489424	1.45 MILES	2020 4C	Tennessee River	Marshall	0.00	1.45	36.92069	-88.37918	36.90818	-88.36346	2020
KY-476	KY489424-1.05_01	Rename			Chestnut Creek UT 0.0 to 2.9	Mouth to Pond at Headwaters	River/Stream	489424	2.90 MILES	2020 5	Tennessee River	Marshall	0.00	2.90	36.91763	-88.38763	36.94841	-88.36108	2020
KY-2697	KYDOW015_00	Rename			Chickasaw Park Lake	Entire Pond	Lake/Reservoir	484	1 ACRES	2006 5	Salt River	Jefferson			38.23941	-85.83168	38.24109	-85.83237	2020
KY-2163	KY511351_01	Rename			Chimney Top Creek 0.0 to 4.8	Mouth to Headwaters	River/Stream	511351	4.80 MILES	2010 2	Kentucky River	Wolfe	0.00	4.80	37.82323	-83.62689	37.76756	-83.61057	2020
KY-478	KY489481-1.05_01	Rename			Chinns Branch UT 0.0 to 0.9	Mouth to Land Use Change (woodland)	River/Stream	489481	0.90 MILES	2004 5	Ohio River	Greenup	0.00	0.90	38.54622	-82.76118	38.53907	-82.75163	2020
KY-2164	KY511363_01	Rename			Christy Creek 0.0 to 7.2	Mouth to Forested Area	River/Stream	511363	7.20 MILES	2016 5	Licking River	Rowan	0.00	7.20	38.19285	-83.41149	38.19209	-83.29689	2020
KY-2165	KY511363_02	Rename			Christy Creek 7.2 to 9.25	Andy White Branch to Forested Reach	River/Stream	511363	2.05 MILES	2016 5	Licking River	Rowan	7.20	9.25	38.19209	-83.29691	38.18765	-83.26822	2020
KY-343	KY488140-3.6-A_00	Rename			City Lake (aka Carlisle Pond 1)	Entire Reservoir	Lake/Reservoir	369	5 ACRES	2020 3	Licking River	Nicholas			38.31039	-84.04055	38.30754	-84.03899	2020
KY-2908					City Lake (Marion)	Entire Reservoir	Lake/Reservoir	489522	20 ACRES	2020 2	Ohio River	Crittenden			37.31035	-88.09178	37.30576	-88.08554	2020
KY-479	KY489524_01	Rename			Clanton Creek 0.0 to 4.9	Mouth to UT	River/Stream	489524	4.90 MILES	2000 5	Ohio River	Ballard	0.00	4.90	37.12949	-89.06847	37.16381	-89.00716	2020
KY-480	KY489550_01	Rename			Clarks Creek 0.0 to 5.2	Mouth to Jacks Lick Creek	River/Stream	489550	5.20 MILES	2004 2	Kentucky River	Grant	0.00	5.20	38.66241	-84.72998	38.67366	-84.67926	2020
KY-2808					Clarks River 0.0 to 2.5	Mouth to Horse Branch	River/Stream	489552	2.50 MILES	2020 3	Tennessee River	McCracken	0.00	2.50	37.04760	-88.54247	37.02133	-88.55686	2020
KY-482	KY489552_02	Rename			Clarks River 13.1 to 20.55	West Fork Clarks River to Lick Creek	River/Stream	489552	7.45 MILES	2020 5	Tennessee River	Marshall, McCracken	13.10	20.55	36.96969	-88.52960	36.93933	-88.47068	2020
KY-483	KY489552_03	Rename			Clarks River 28.7 to 30.8	Persimmon Slough to Middle Fork Creek	River/Stream	489552	2.10 MILES	2002 2	Tennessee River	Marshall	28.70	30.80	36.91438	-88.42009	36.90200	-88.40381	2020
KY-484	KY489552_04	Rename			Clarks River 31.7 to 34.85	Chestnut Creek to Bee Creek	River/Stream	489552	3.15 MILES	2002 2	Tennessee River	Marshall	31.70	34.85	36.90488	-88.39530	36.89265	-88.37236	2020
KY-485	KY489552_05	Rename			Clarks River 34.85 to 42.7	Bee Creek to Beaverdam Slough	River/Stream	489552	7.85 MILES	2020 5	Tennessee River	Marshall	34.85	42.70	36.89264	-88.37235	36.84142	-88.30776	2020
KY-481	KY489552_01	Rename			Clarks River 4.9 to 13.1	Power Line/Reidland/land use change to West Fork of Clarks River	River/Stream	489552	8.20 MILES	2008 5	Tennessee River	McCracken	4.90	13.10	37.00689	-88.54117	36.96969	-88.52960	2020
KY-486	KY489552_06	Rename			Clarks River 42.7 to 48.9	Beaverdam Slough to Martins Creek	River/Stream	489552	6.20 MILES	2002 2	Tennessee River	Marshall	42.70	48.90	36.84142	-88.30776	36.78181	-88.28540	2020
KY-487	KY489552_07	Rename			Clarks River 52.1 to 55.5	Rockhouse Creek to land use change	River/Stream	489552	3.40 MILES	2012 5	Tennessee River	Calloway	52.10	55.50	36.74878	-88.27653	36.71578	-88.27737	2020
KY-488	KY489552_08	Rename			Clarks River 55.5 to 64.5	UT (land use change) to Clayton Creek	River/Stream	489552	9.00 MILES	2008 5	Tennessee River	Calloway	55.50	64.50	36.71578	-88.27737	36.61488	-88.28836	2020
KY-489	KY489552_09	Rename			Clarks River 64.5 to 66.7	Clayton Creek to Middle and East Forks of Clarks River	River/Stream	489552	2.20 MILES	2008 5	Tennessee River	Calloway	64.50	66.70	36.61488	-88.28836	36.58952	-88.30263	2020
KY-492	KY489552-63.8_01	Rename			Clarks River UT 0.0 to 1.2	Mouth to East Fork Clayton Creek	River/Stream	489552	1.20 MILES	2012 4A	Tennessee River	Calloway	0.00	1.20	36.62239	-88.28558	36.60782	-88.27930	2020
KY-491	KY489552-59.9_01	Rename			Clarks River UT 0.0 to 3.3	Mouth to Headwaters	River/Stream	489552	3.30 MILES	2006 5	Tennessee River	Calloway	0.00	3.30	36.66804	-88.28163	36.63640	-88.30993	2020
KY-490	KY489552-18.2-0.35_01	Rename			Clarks River UT of UT 0.0 to 0.95	Mouth to Point of Discharge	River/Stream	489552	0.95 MILES	2012 3	Tennessee River	McCracken, Marshall	0.00	0.95	36.96182	-88.48196	36.97364	-88.48032	2020
KY-502	KY489555_01	Rename			Clarks Run 0.0 to 2.15	Mouth to UT	River/Stream	489555	2.15 MILES	2006 5	Licking River	Mason	0.00	2.15	38.59348	-83.92374	38.60314	-83.90071	2020
KY-493	KY489554_01	Rename			Clarks Run 1.5 to 4.45	Herrington Lake Backwaters to UT (Danville Country Club)	River/Stream	489554	2.95 MILES	2010 5	Kentucky River	Boyle	1.50	4.45	37.65203	-84.71882	37.64769	-84.73600	2020
KY-494	KY489554_02	Rename			Clarks Run 4.45 to 6.7	UT (Danville Country Club) to Danville STP outfall	River/Stream	489554	2.25 MILES	2010 4A	Kentucky River	Boyle	4.45	6.70	37.64769	-84.73600	37.63047	-84.73969	2020
KY-495	KY489554_03	Rename			Clarks Run 6.7 to 14.3	Danville WWTP to Headwaters	River/Stream	489554	7.60 MILES	2010 5	Kentucky River	Boyle	6.70	14.30	37.63047	-84.73969	37.59489	-84.83282	2020

KY-499	KY489554-8.4_01	Rename			Clarks Run UT 0.0 to 0.7	Mouth to Headwaters	River/Stream	489554	0.70 MILES	2016 4A	Kentucky River	Boyle	0.00	0.70	37.63308	-84.76491	37.63306	-84.76741	2020
KY-500	KY489554-9.2_01	Rename			Clarks Run UT 0.0 to 0.8	Mouth to Headwaters	River/Stream	489554	0.80 MILES	2016 4A	Kentucky River	Boyle	0.00	0.80	37.63456	-84.77801	37.64306	-84.77607	2020
KY-501	KY489554-9.65_01	Rename			Clarks Run UT 0.0 to 1.0	Mouth to Headwaters	River/Stream	489554	1.00 MILES	2016 4A	Kentucky River	Boyle	0.00	1.00	37.63058	-84.78281	37.61895	-84.77598	2020
KY-497	KY489554-10.4_01	Rename			Clarks Run UT 0.0 to 1.2	Mouth to Headwaters	River/Stream	489554	1.20 MILES	2016 4A	Kentucky River	Boyle	0.00	1.20	37.62918	-84.79464	37.64607	-84.80928	2020
KY-498	KY489554-7.55_01	Rename			Clarks Run UT 0.0 to 1.25	Mouth to Headwaters	River/Stream	489554	1.25 MILES	2016 4A	Kentucky River	Boyle	0.00	1.25	37.63069	-84.75262	37.62170	-84.76882	2020
KY-496	KY489554-10.0_01	Rename			Clarks Run UT 0.0 to 2.4	Mouth to Headwaters	River/Stream	489554	2.40 MILES	2016 4A	Kentucky River	Boyle	0.00	2.40	37.62975	-84.78819	37.60640	-84.80741	2020
KY-503	KY489562_01	Rename			Clary Branch 0.0 to 2.05	Mouth to Headwaters	River/Stream	489562	2.05 MILES	2004 5	Ohio River	Lewis	0.00	2.05	38.57072	-83.43368	38.54861	-83.41626	2020
KY-504	KY489573_01	Rename			Clay Fork 0.0 to 3.9	Mouth to Headwaters	River/Stream	489573	3.90 MILES	2004 2	Little Sandy River	Elliott	0.00	3.90	38.23035	-83.15656	38.23445	-83.21752	2020
KY-505	KY489573-2.3_01	Rename			Clay Fork UT 0.0 to 1.2	Clay Fork to Headwaters	River/Stream	489573	1.20 MILES	2010 5	Little Sandy River	Elliott	0.00	1.20	38.22932	-83.19260	38.24229	-83.21476	2020
KY-507	KY489584_01	Rename			Clay Lick Creek 0.0 to 2.3	Kentucky River to Headwaters	River/Stream	489584	2.30 MILES	2000 2	Kentucky River	Owen	0.00	2.30	38.47338	-84.95632	38.50123	-84.94242	2020
KY-506	KY489582_01	Rename			Clay Lick Creek 4.0 to 5.4	0.3 miles below Martin Prewitt Road to 0.1 miles below Minor Hollow	River/Stream	489582	1.40 MILES	2002 5	Green River	Hart	4.00	5.40	36.95015	-85.66985	36.93209	-85.65617	2020
KY-508	KY489589_01	Rename			Claylick Branch 2.9 to 6.2	Mud Branch to Confluence with 2nd Order UT	River/Stream	489589	3.30 MILES	2014 2	Green River	Grayson	2.90	6.20	37.35606	-86.25423	37.39892	-86.35945	2020
KY-512	KY489591_03	Rename			Claylick Creek 10.8 to 14.0	Clement Creek to Preacher Creek	River/Stream	489591	3.20 MILES	2020 5	Lower Cumberland River	Crittenden	10.80	14.00	37.25576	-88.16021	37.28880	-88.13909	2020
KY-513	KY489591_04	Rename			Claylick Creek 14.8 to 15.7	UT to UT	River/Stream	489591	0.90 MILES	2002 5	Lower Cumberland River	Crittenden	14.80	15.70	37.29753	-88.13545	37.30601	-88.12447	2020
KY-510	KY489591_01	Rename			Claylick Creek 2.05 to 4.85	Axel Creek to Pickett Springs Creek	River/Stream	489591	2.80 MILES	2020 5	Lower Cumberland River	Crittenden, Livingston	2.05	4.85	37.19538	-88.21095	37.21871	-88.19794	2020
KY-509	KY489590_01	Rename			Claylick Creek 2.2 to 3.05	Road Crossing to Land Use Change (Between Betsy and Long Branch)	River/Stream	489590	0.85 MILES	2004 5	Green River	Warren	2.20	3.05	37.15869	-86.57968	37.15403	-86.56873	2020
KY-511	KY489591_02	Rename			Claylick Creek 4.85 to 10.8	Puckett Spring Creek to Clement Creek	River/Stream	489591	5.95 MILES	2020 5	Lower Cumberland River	Crittenden	4.85	10.80	37.21871	-88.19794	37.25576	-88.16021	2020
KY-3282					Claylick Creek UT 0.0 to 2.05	Mouth to pond at headwaters	River/Stream	489591	2.05 MILES	2020 5	Lower Cumberland River	Crittenden	0.00	2.05	37.27639	-88.14402	37.30027	-88.15835	2020
KY-514	KY489601_01	Rename			Clayton Creek 0.8 to 3.35	East Fork of Clarks River to UT	River/Stream	489601	2.55 MILES	2008 5	Tennessee River	Calloway	0.80	3.35	36.60723	-88.27965	36.58935	-88.25135	2020
KY-515	KY489601_02	Rename			Clayton Creek 3.35 to 7.75	UT to Headwaters	River/Stream	489601	4.40 MILES	2008 5	Tennessee River	Calloway	3.35	7.75	36.58935	-88.25135	36.53605	-88.24846	2020
KY-516	KY489606_01	Rename			Clear Creek 0.0 to 4.1	Mouth to Headwaters	River/Stream	489606	4.10 MILES	2014 5	Kentucky River	Madison	0.00	4.10	37.84678	-84.16329	37.80015	-84.18777	2020
KY-522	KY489613_01	Rename			Clear Creek 0.0 to 4.5	Mouth to Sulphur Branch	River/Stream	489613	4.50 MILES	2002 5	Salt River	Hardin	0.00	4.50	37.79131	-85.74252	37.76173	-85.79949	2020
KY-521	KY489611_01	Rename			Clear Creek 0.0 to 5.15	Mouth to Headwaters	River/Stream	489611	5.15 MILES	2010 5	Big Sandy River	Floyd	0.00	5.15	37.38919	-82.73118	37.36115	-82.67648	2020
KY-517	KY489610_01	Rename			Clear Creek 0.0 to 7.5	Mouth to Headwaters	River/Stream	489610	7.50 MILES	2000 5	Tradewater River	Webster, Hopkins	0.00	7.50	37.35069	-87.81333	37.34528	-87.74167	2020
KY-523	KY489614_01	Rename			Clear Creek 0.0 to 9.0	Mouth to East Fork Clear Creek	River/Stream	489614	9.00 MILES	2020 2	Kentucky River	Woodford	0.00	9.00	37.93664	-84.79722	37.92677	-84.72574	2020
KY-3295		Split	KY-525	KY489615_01	Clear Creek 0.0 to 9.2	Bullskin Creek to Shelbyville STP	River/Stream	489615	9.20 MILES	2020 5	Salt River	Shelby	0.00	9.20	38.16191	-85.28012	38.19787	-85.22502	2020
KY-527	KY489617_01	Rename			Clear Creek 0.55 to 3.05	Backwaters to 2nd Order UT	River/Stream	489617	2.50 MILES	2006 5	Tennessee River	Marshall	0.55	3.05	36.78480	-88.21220	36.76565	-88.18837	2020
KY-526	KY489616_01	Rename			Clear Creek 1.05 to 3.2	Pine Mountain Lake to Little Clear Creek	River/Stream	489616	2.15 MILES	2002 5	Upper Cumberland River	Bell	1.05	3.20	36.73961	-83.70273	36.72791	-83.72828	2020
KY-3319					Clear Creek 11.1 to 15.8	Cave Spring Creek to UT approximately 0.25 river miles upstream CR-1119	River/Stream	489614	4.70 MILES	2020 5	Kentucky River	Woodford	11.10	15.80	37.93085	-84.70275	37.97445	-84.71915	2020
KY-518	KY489610_02	Rename			Clear Creek 19.35 to 26.15	Richland Creek to UT	River/Stream	489610	6.80 MILES	2004 5	Tradewater River	Hopkins	19.35	26.15	37.29847	-87.60402	37.28151	-87.52055	2020
KY-519	KY489610_03	Rename			Clear Creek 26.15 to 26.5	UT to SR 1337 Bridge	River/Stream	489610	0.35 MILES	2020 4A	Tradewater River	Hopkins	26.15	26.50	37.28151	-87.52055	37.27749	-87.51603	2020
KY-3196					Clear Creek 3.2 to 10.0	Little Clear Creek to Nelson Branch	River/Stream	489616	6.80 MILES	2020 2	Upper Cumberland River	Bell	3.20	10.00	36.72791	-83.72828	36.69730	-83.80898	2020
KY-2166	KY511394_01	Rename			Clear Creek 3.45 to 7.8	Scaffold Cane Branch to Davis Branch	River/Stream	511394	4.35 MILES	2002 2	Upper Cumberland River	Rockcastle	3.45	7.80	37.44240	-84.27859	37.48595	-84.25532	2020
KY-3296		Split	KY-525	KY489615_01	Clear Creek 9.2 to 14.1	Shelbyville STP to Shelby Lake	River/Stream	489615	4.90 MILES	2020 5	Salt River	Shelby	9.20	14.10	38.19787	-85.22502	38.23001	-85.22133	2020
KY-520	KY489610-25.2_01	Rename			Clear Creek UT 0.0 to 2	Mouth to Outlet of Sewage Plant	River/Stream	489610	2.00 MILES	2008 3	Tradewater River	Hopkins	0.00	2.00	37.29395	-87.52797	37.29666	-87.49979	2020
KY-524	KY489614-13.55_01	Rename			Clear Creek UT 0.0 to 4.8	Mouth to Headwaters	River/Stream	489614	4.80 MILES	2000 2	Kentucky River	Woodford, Jessamine	0.00	4.80	37.95518	-84.69988	37.96736	-84.64080	2020
KY-2169	KY511400_01	Rename			Clear Fork 0.0 to 5.9	Mouth to Headwaters	River/Stream	511400	5.90 MILES	2000 2	Licking River	Rowan	0.00	5.90	38.26173	-83.43320	38.30968	-83.50127	2020
KY-2167	KY511399_01	Rename			Clear Fork 0.0 to 9.15	Mouth to Wolf Creek	River/Stream	511399	9.15 MILES	2020 2	Upper Cumberland River	Whitley	0.00	9.15	36.73412	-84.14809	36.66309	-84.13344	2020
KY-2168	KY511399_02	Rename			Clear Fork 17.0 to 19.5	Elk Creek to Mud Creek	River/Stream	511399	2.50 MILES	2006 2	Upper Cumberland River	Whitley	17.00	19.50	36.60805	-84.12284	36.59473	-84.10520	2020
KY-528	KY489635_01	Rename			Clear Fork Creek 0.0 to 6.15	Mouth to Black Lick Creek	River/Stream	489635	6.15 MILES	2008 2	Green River	Grayson	0.00	6.15	36.98618	-86.63216	36.94291	-86.64169	2020
KY-3161					Clear Prong 3.8 to 5.1	Land Use Change to Land Use Change	River/Stream	489641	1.30 MILES	2020 3	Green River	Breckinridge	3.80	5.10	37.63974	-86.33846	37.64337	-86.32043	2020
KY-3283					Clement Creek 0.0 to 4.75	Mouth to headwaters	River/Stream	489653	4.75 MILES	2020 5	Lower Cumberland River	Crittenden	0.00	4.75	37.25577	-88.16017	37.29294	-88.10413	2020
KY-3225					Clemons Fork 0.0 to 2.2	Mouth to Millseat Branch	River/Stream	489661	2.20 MILES	2020 3	Kentucky River	Breathitt	0.00	2.20	37.45511	-83.16582	37.47440	-83.14367	2020
KY-529	KY489661_01	Rename			Clemons Fork 2.2 to 4.75	Millseat Branch to Headwaters	River/Stream	489661	2.55 MILES	2006 2	Kentucky River	Breathitt	2.20	4.75	37.47440	-83.14367	37.49663	-83.12721	2020
KY-2170	KY511408_01	Rename			Cliffty Creek 0.0 to 2.2	Mouth to Pine Branch	River/Stream	511408	2.20 MILES	2002 2	Kentucky River	Menifee, Wolfe	0.00	2.20	37.82101	-83.55590	37.83155	-83.52383	2020
KY-2171	KY511409_01	Rename			Cliffty Creek 0.0 to 2.7	Mouth to Rocky Branch	River/Stream	511409	2.70 MILES	2016 5	Upper Cumberland River	Pulaski	0.00	2.70	37.21642	-84.46935	37.24119	-84.49848	2020
KY-3321		Split	KY-530	KY489684_01	Clifty Creek 0.0 to 7.7	Mouth to Little Clifty Creek	River/Stream	489684	7.70 MILES	2020 2	Green River	Logan	0.00	7.70	36.99795	-86.97893	36.99759	-87.05518	2020
KY-2828		Split	KY-531	KY489686_01	Clifty Creek 17.35 to 21.0	Western Kentucky Parkway to Headwaters	River/Stream	489686	3.65 MILES	2012 2	Green River	Grayson	17.35	21.00	37.51366	-86.15115	37.48722	-86.10929	2020
KY-3175					Clifty Creek 2.7 to 7.5	Rough River Lake backwaters to Barton Run	River/Stream	489686	4.80 MILES	2020 4C	Green River	Grayson	2.70	7.50	37.57492	-86.26458	37.54800	-86.23505	2020
KY-2829		Split	KY-531	KY489686_01	Clifty Creek 7.5 to 17.35	Barton Run to Western Kentucky Parkway	River/Stream	489686	9.85 MILES	2014 2	Green River	Grayson	7.50	17.35	37.54800	-86.23505	37.51366	-86.15115	2020
KY-3322		Split	KY-530	KY489684_01	Clifty Creek 7.7 to 13.4	Little Clifty Creek to Sulfur Lick	River/Stream	489684	5.70 MILES	2002 2	Green River	Todd	7.70	13.40	36.99759	-87.05518	36.98189	-87.12934	2020
KY-2873					Clover Bottom Creek 0.0 to 1.4	Mouth to Clover River Mile 1.4	River/Stream	511420	1.40 MILES	2020 3	Upper Cumberland River	Jackson	0.00	1.40	37.40908	-84.12219	37.41811	-84.10529	2020
KY-532	KY489703_01	Rename			Clover Creek 7.4 to 10.3	Beech Fork to Springlick Branch	River/Stream	489703	2.90 MILES	2012 5	Ohio River	Breckinridge	7.40	10.30	37.80126	-86.57276	37.79486	-86.54746	2020
KY-2172	KY511423_01	Rename			Clover Fork Cumberland River 0.0 to 8.65	Mouth to Yocum Creek	River/Stream	511423	8.65 MILES	2020 5	Upper Cumberland River	Harlan	0.00	8.65	36.85571	-83.31688	36.86595	-83.19288	2020
KY-2174	KY511423_03	Rename			Clover Fork Cumberland River 14.8 to 17.6	Seagraves Creek to Fugitt Creek	River/Stream	511423	2.80 MILES	2018 5	Upper Cumberland River	Harlan	14.80	17.60	36.89592	-83.11871	36.91126	-83.08635	2020
KY-2175	KY511423_04	Rename			Clover Fork Cumberland River 17.6 to 27.6	Fugitt Creek to Huff Creek	River/Stream	511423	10.00 MILES	1998 5	Upper Cumberland River	Harlan	17.60	27.60	36.91126	-83.08635	36.87267	-82.95382	2020
KY-2176	KY511423_05	Rename			Clover Fork Cumberland River 27.6 to 28.4	Huff Creek to Louder Creek	River/Stream	511423	0.80 MILES	2002 5	Upper Cumberland River	Harlan	27.60	28.40	36.87267	-82.95382	36.87449	-82.94087	2020
KY-2177	KY511423_06	Rename			Clover Fork Cumberland River 28.4 to 33.1	Louder Creek to Headwaters	River/Stream	511423	4.70 MILES	2002 5	Upper Cumberland River	Harlan	28.40	33.10	36.87449	-82.94087	36.89957	-82.87182	2020
KY-2173	KY511423_02	Rename			Clover Fork Cumberland River 8.6 to 14.8	Yocum Creek to Seagraves Creek	River/Stream	511423	6.20 MILES	2002 5	Upper Cumberland River	Harlan	8.60	14.80	36.86595	-83.19288	36.89592	-83.11871	2020
KY-2178	KY511427_01	Rename			Cloverlick Creek 0.0 to 5.0	Mouth to Residential Area	River/Stream	511427	5.00 MILES	2006 5	Upper Cumberland River	Harlan	0.00	5.00	36.97357	-82.99488	36.92676	-82.96300	2020
KY-533	KY489769_01	Rename			Coefield Creek 0.0 to 8.9	Mouth to Kit Love Branch	River/Stream	489769	8.90 MILES	2010 5	Ohio River	Crittenden	0.00	8.90	37.36668	-88.30158	37.33108	-88.22945	2020
KY-534	KY489772_01	Rename			Coffee Creek 0.0 to 4.2	Mouth to Headwaters	River/Stream	489772	4.20 MILES	2006 5	Licking River	Morgan	0.00	4.20	37.90589	-83.09953	37.87963	-83.04083	2020
KY-2179	KY511447_01	Rename			Coffey Branch 0.0 to 2.0	Mouth to Headwaters	River/Stream	511447	2.00 MILES	2002 2	Upper Cumberland River	McCreary	0.00	2.00	36.68957	-84.51972	36.70062	-84.49019	2020
KY-2180	KY511453_01	Rename			Cogur Fork 0.0 to 7.9	Mouth to Headwaters	River/Stream	511453	7.90 MILES	2012 2	Upper Cumberland River	McCreary	0.00	7.90	36.79972	-84.39768	36.83414	-84.49559	2020
KY-2684	KY90003741_00	Rename			Cohorn Spring	Entire Springshed of Cohorn Springs	Spring	90003741	9142 ACRES	2020 3	Lower Cumberland River	Lyon			37.14270	-88.10886	37.11375	-88.02342	2020
KY-535	KY489804_01	Rename			Coldwater Fork 2.0 to 5.25	Blacklog Fork to Collins Branch	River/Stream	489804	3.25 MILES	2016 5	Big Sandy River	Martin	2.00	5.25	37.85612	-82.51944	37.82369	-82.50443	2020
KY-536	KY489804_02	Rename			Coldwater Fork 5.25 to 8.8	Collins Branch to Confluence of Walnut Fork and Old Road Fork	River/Stream	489804	3.55 MILES	2006 2	Big Sandy River	Martin	5.25	8.80	37.82369	-82.50443	37.78714	-82.52146	2020
KY-2181	KY511467_01	Rename			Coles Branch 0.0 to 2.1	Mouth to Headwaters	River/Stream	511467	2.10 MILES	1998 2	Upper Cumberland River	McCreary	0.00	2.10	36.93807	-84.74180	36.94840	-84.77419	2020
KY-537	KY489833_01	Rename			Coles Fork 0.0 to 5.5	Mouth to Saddle Branch	River/Stream	489833	5.50 MILES	1998 2	Kentucky River	Knott, Breathitt	0.00	5.50	37.45731	-83.13460	37.45096	-83.07124	2020
KY-2715					Coles Fork 5.5 to 6.5	Saddle Branch to Headwaters	River/Stream	489833	1.00 MILES	2020 3	Kentucky River	Knott	5.50	6.50	37.45096	-83.07124	37.45472	-83.05707	2020
KY-112	KY485675_01	Rename			Colliers Creek 0.0 to 4.1	Mouth to Headwaters	River/Stream	485675	4.10 MILES	2008 5	Kentucky River	Letcher	0.00	4.10	37.01476	-82.88105	37.01735	-82.82717	2020
KY-2182	KY511474_01	Rename			Collins Fork 2.6 to 12.35	Near Buzzard Creek to Bull Creek	River/Stream	511474	9.75 MILES	2016 5	Kentucky River	Knox, Clay	2.60	12.35	37.09409	-83.75556	36.98987	-83.82905	2020
KY-2630	KY516831_00	Rename			Combs Lake	Dam to Lake Boundary	Lake/Reservoir	516831	33 ACRES	2020 2	Kentucky River	Clay			37.16761	-83.70831	37.16394	-83.69928	2020
KY-3136					Company Branch 0.0 to 1.75	Mouth to headwaters	River/Stream	489910	1.75 MILES	2020 5	Kentucky River	Letcher	0.00	1.75	37.15921	-82.79813	37.18256	-82.79102	2020
KY-2686	KY90003861_00	Rename			Conway Springs	Entire Springshed of Conway Spring	Spring	90003861	6850 ACRES	2020 2	Lower Cumberland River	Crittenden			37.19266	-88.10034	37.26684	-88.08696	2020
KY-2183	KY511505_01	Rename			Cooks Branch 0.0 to 3.15	Mouth to Headwaters	River/Stream	511505	3.15 MILES	2004 2	Licking River	Montgomery	0.00	3.15	37.94239	-83.77746	37.90822	-83.79457	2020
KY-538	KY490017_01	Rename			Cooksey Fork 0.0 to 1.25	Mouth to Change Land Use	River/Stream	490017	1.25 MILES	2016 5	Big Sandy River	Lawrence	0.00	1.25	38.15746	-82.74491	38.14587	-82.75596	2020
KY-539	KY490021-2.1_01	Rename			Cool Springs Creek UT 0.0 to 1.7	Mouth to 0.3 Miles Below Headwaters	River/Stream	490021	1.70 MILES	2004 5	Green River	Adair	0.00	1.70	37.07758	-85.48405	37.09770	-85.49491	2020
KY-540	KY490025_01	Rename			Cooley Creek 0.65 to 2.4	UT to Headwaters	River/Stream	490025	1.75 MILES	2002 4A	Mississippi River	Graves	0.65	2.40	36.82339	-88.64169	36.84518	-88.62373	2020
KY-541	KY490062_01	Rename			Cooper Run 0.0 to 10.1	mouth to (headwaters) pond	River/Stream	490062	10.10 MILES	2020 5	Licking River	Bourbon	0.00	10.10	38.27623	-84.27438	38.20439	-84.37045	2020
KY-543	KY490062-6.95_01	Rename			Cooper Run UT 0.0 to 1.0	Mouth to Pond	River/Stream	490062	1.00 MILES	2012 4A	Licking River	Bourbon	0.00	1.00	38.23089	-84.33887	38.24144	-84.35108	2020
KY-544	KY490062-7.25_01	Rename			Cooper Run UT 0.0 to 3.05	Mouth to Pond	River/Stream	490062	3.05 MILES	2012 5	Licking River	Bourbon	0.00	3.05	38.22957	-84.34374	38.20930	-84.37474	2020
KY-542	KY490062-5.85_01	Rename			Cooper Run UT 0.0 to 3.6	Mouth to Pond	River/Stream	490062	3.60 MILES	2012 5	Licking River	Bourbon	0.00	3.60	38.23573	-84.32143	38.20029	-84.30573	2020
KY-545	KY490067_01	Rename			Coopertown Creek 0.0 to 4.95	Mouth to Williamstown Creek	River/Stream	490067	4.95 MILES	2006 2	Licking River	Pendleton, Grant	0.00	4.95	38.58769	-84.46468	38.62046	-84.52067	2020
KY-546	KY490072_01	Rename			Cope Fork 0.0 to 2.0	Mouth to Cockrill Fork	River/Stream	490072	2.00 MILES	2006 5	Kentucky River	Breathitt	0.00	2.00	37.61694	-83.38944	37.60662	-83.36469	2020
KY-2184	KY511529_01	Rename			Copper Creek 0.0 to 2.2	Mouth to Change in Riparian Use	River/Stream	511529	2.20 MILES	2008 4A	Kentucky River	Rockcastle, Lincoln	0.00	2.20	37.45451	-84.47253	37.45438	-84.44310	2020
KY-547	KY490078_01	Rename			Copper Creek 0.0 to 2.8	Mouth to Headwaters	River/Stream	490078	2.80 MILES	2008 5	Tradewater River	Hopkins	0.00	2.80	37.23830	-87.58950	37.22706	-87.54403	2020
KY-2185	KY511529_02	Rename			Copper Creek 2.2 to 5.15	land use change to mouth of UT	River/Stream	511529	2.95 MILES	2016 5	Kentucky River	Lincoln	2.20	5.15	37.45438	-84.44310	37.46111	-84.40167	2020
KY-548	KY490078-1.1_01	Rename			Copper Creek UT 0.0 to 1.1	Mouth to Headwaters	River/Stream	490078	1.10 MILES	2008 5	Tradewater River	Hopkins	0.00	1.10	37.23072	-87.57187	37.24020	-87.55856	2020
KY-2186	KY511531_01	Rename			Copperas Branch 0.4 to 1.5	Near Sample Point to Forested Area	River/Stream	511531	1.10 MILES	2016 4A	Licking River	Rowan	0.40	1.50	38.21638	-83.48963	38.22155	-83.50652	2020
KY-549	KY490083_01	Rename			Copperas Creek 0.0 to 3.6	Mouth to Headwaters	River/Stream	490083	3.60 MILES	2008 5	Tradewater River	Hopkins	0.00	3.60	37.16826	-87.61879	37.20814	-87.62056	2020
KY-33	KY490083-3.1_01	Rename			Copperas Creek UT 0.0 to 0.9	Mouth to Headwaters	River/Stream	490083	0.90 MILES	2008 5	Tradewater River	Hopkins	0.00	0.90	37.20196	-87.62375	37.20337	-87.63893	2020
KY-2187	KY511533_01	Rename			Copperas Fork 0.0 to 3.6	Mouth to Headwaters	River/Stream	511533	3.60 MILES	2006 4A	Upper Cumberland River	McCreary	0.00	3.60	36.86510	-84.54852	36.88498	-84.50000	2020
KY-2690	KYCLN052_00	Rename			Corbin City Reservoir	Dam to Lake Boundary	Lake/Reservoir	52	69 ACRES	2020 5	Upper Cumberland River	Laurel			36.97005	-84.12021	36.96467	-84.11370	2020
KY-34	KY490110_00	Rename			Corinth Lake	Dam to Lake Boundaries	Lake/Reservoir	490110	83 ACRES	2016 2	Kentucky River	Grant			38.50581	-84.58919	38.49483	-84.57513	2020
KY-35	KY490116_01	Rename			Corn Creek 0.0 to 4.5	Mouth to Pryors Fork	River/Stream	490116	4.50 MILES	2000 5	Ohio River	Trimble	0.00	4.50	38.59610	-85.40265	38.63687	-85.40226	2020
KY-3197					Corn Creek 6.7 to 11.9	Furnace Branch to Pond	River/Stream	490116	5.20 MILES	2020 3	Ohio River	Trimble	6.70	11.90	38.66063	-85.38644	38.66242	-85.31677	2020
KY-550	KY490116-0.8_01	Rename			Corn Creek UT 0.0 to 2.5	Mouth to Headwaters	River/Stream	490116	2.50 MILES	2006 2	Ohio River	Trimble	0.00	2.50	38.60284	-85.42320	38.61150	-85.38258	2020
KY-551	KY490116-0.8-0.6_01	Rename			Corn Creek UT of UT 0.0 to 2.2	UT to Headwaters	River/Stream	490116	2.20 MILES	2012 2	Ohio River	Trimble	0.00	2.20	38.60178	-85.42040	38.60730	-85.38683	2020
KY-552	KY490159_00	Rename			County Lake	Entire Reservoir	Lake/Reservoir	490159	24 ACRES	2020 5	Green River	Metcalfe			37.04405	-85.60940	37.03821	-85.60545	2020
KY-2188	KY511588_01	Rename			Cow Creek 0.0 to 2.8	Mouth to Tickey Fork Confluence	River/Stream	511588	2.80 MILES	2000 2	Kentucky River	Estill	0.00	2.80	37.67972	-83.93319	37.70304	-83.91858	2020
KY-2189	KY511592_01	Rename			Cow Creek 0.0 to 2.8	Mouth to Left & Right Fork Confluence	River/Stream	511592	2.80 MILES	2000 2	Kentucky River	Owsley	0.00	2.80	37.44684	-83.64402	37.43847	-83.61116	2020
KY-553	KY490187_01	Rename			Cow Creek 0.0 to 4.85	Woods Branch to Headwaters	River/Stream	490187	4.85 MILES	2016 5	Big Sandy River	Floyd	0.00	4.85	37.63660	-82.69670	37.61924	-82.62743	2020
KY-2190	KY511601_00	Rename			Cowbell Lake (aka Berea Reservoir)	Dam to Reservoir Boundary	Lake/Reservoir	696	21 ACRES	2016 2	Kentucky River	Madison			37.53916	-84.22794	37.53327	-84.22987	2020
KY-554	KY490220_01	Rename			Cox Creek 0.0 to 4.75	Mouth to West Fork Cox Creek	River/Stream	490220	4.75 MILES	2020 5	Salt River	Bullitt, Nelson	0.00	4.75	37.99652	-85.55221	37.96545	-85.53251	2020
KY-556	KY490220_03	Rename			Cox Creek 11.4 to 18.65	From Froman Creek to Caney Fork	River/Stream	490220	7.25 MILES	2012 5	Salt River	Nelson	11.40	18.65	37.91383	-85.50323	37.87613	-85.43433	2020
KY-557	KY490220_04	Rename			Cox Creek 18.65 to 23.8	From Caney Fork to Headwaters	River/Stream	490220	5.15 MILES	2010 5	Salt River	Nelson	18.65	23.80	37.87613	-85.43433	37.83367	-85.38217	2020
KY-555	KY490220_02	Rename			Cox Creek 4.75 to 11.4	West Fork Cox Creek to Froman Creek	River/Stream	490220	6.65 MILES	2020 4A	Salt River	Nelson	4.75	11.40	37.96545	-85.53251	37.91362	-85.50310	2020
KY-558	KY490231_01	Rename			Cox Run 0.0 to 3.4	Mouth to UT	River/Stream	490231	3.40 MILES	2004 5	Green River	Hardin, Larue	0.00	3.40	37.56068	-85.89992	37.53386	-85.86197	2020
KY-3284					Cox Spring Branch 0.0 to 2.75	Sink to headwaters	River/Stream	490232	2.75 MILES	2020 5	Lower Cumberland River	Livingston	0.00	2.75	37.23742	-88.21841	37.27207	-88.22617	2020
KY-3285					Cox Spring Branch UT 0.0 to 1.55	Mouth to headwaters	River/Stream	490232	1.55 MILES	2020 5	Lower Cumberland River	Livingston	0.00	1.55	37.25035	-88.22436	37.26781	-88.24253	2020
KY-559	KY490240_01	Rename			Crab Creek 0.0 to 4.8	Mouth to UT (2nd Order)	River/Stream	490240	4.80 MILES	2008 5	Lower Cumberland River	Lyon	0.00	4.80	37.14631	-88.14831	37.10653	-88.11474	2020
KY-560	KY490243_01	Rename			Crab Orchard Creek 0.0 to 1.6	UT to Gilmore Creek	River/Stream	490243	1.60 MILES	2002 2	Upper Cumberland River	Lincoln	0.00	1.60	37.35711	-84.56640	37.37241	-84.56899	2020
KY-561	KY490247_01	Rename			Craborchard Creek 0.0 to 3.3	Mouth to KY 1687	River/Stream	490247	3.30 MILES	2014 5	Green River	Hopkins	0.00	3.30	37.16572	-87.45107	37.15450	-87.49814	2020
KY-566	KY490248_02	Rename			Craborchard Creek 19.2 to 21.35	Lynn Fork to Bad Stone Ditch	River/Stream	490248	2.15 MILES	2004 5	Tradewater River	Webster	19.20	21.35	37.51314	-87.76218	37.54190	-87.74818	2020
KY-562	KY490247_02	Rename			Craborchard Creek 3.3 to 7.1	SR 1687 Bridge to Headwaters	River/Stream	490247	3.80 MILES	2014 5	Green River	Hopkins	3.30	7.10	37.15450	-87.49814	37.13498	-87.53540	2020
KY-565	KY490248_01	Rename			Craborchard Creek 9.2 to 13.6	Vaughn Ditch to Slover Creek	River/Stream	490248	4.40 MILES	2014 5	Tradewater River	Webster	9.20	13.60	37.46160	-87.88274	37.45462	-87.80736	2020
KY-563	KY490247-1.1_01	Rename			Craborchard Creek UT 0.0 to 1.6	Mouth to Headwaters	River/Stream	490247	1.60 MILES	2014 2	Green River	Hopkins	0.00	1.60	37.15772	-87.46432	37.17682	-87.47385	2020
KY-567	KY490248-15.0_01	Rename			Craborchard Creek UT 0.0 to 1.6	Mouth to Outfall	River/Stream	490248	1.60 MILES	2008 3	Tradewater River	Webster	0.00	1.60	37.46047	-87.78242	37.47905	-87.78541	2020
KY-564	KY490247-1.8-1.2_01	Rename			Craborchard Creek UT of UT 0.0 to 0.88	Mouth to Headwaters	River/Stream	490247	0.88 MILES	2014 2	Green River	Hopkins	0.00	0.88	37.17006	-87.48962	37.18061	-87.49508	2020
KY-3137					Crafts Colly Creek 0.0 to 5.75	Mouth to headwaters	River/Stream	490258	5.75 MILES	2020 5	Kentucky River	Letcher	0.00	5.75	37.11915	-82.79317	37.19301	-82.79920	2020
KY-2803		Split	KY-568	KY490271_01	Craig Creek 0.1 to 2.7	Mouth to Unnamed Tributary	River/Stream	490271	2.60 MILES	2006 2	Kentucky River	Woodford	0.10	2.70	37.97902	-84.82058	37.98133	-84.78475	2020
KY-2802		Split	KY-568	KY490271_01	Craig Creek 2.7 to 4.0	Unnamed tributary to headwaters	River/Stream	490271	1.30 MILES	2020 2	Kentucky River	Woodford	2.70	4.00	37.98133	-84.78475	37.96674	-84.77632	2020
KY-2191	KY511617_01	Rename			Craig Creek 6.7 to 7.8	Laurel River Reservoir backwaters to SR 312	River/Stream	511617	1.10 MILES	2008 5	Upper Cumberland River	Laurel	6.70	7.80	37.01297	-84.19325	37.01931	-84.17911	2020
KY-2192	KY511617_02	Rename			Craig Creek 7.8 to 8.9	SR 312 to Sutton Branch	River/Stream	511617	1.10 MILES	2006 2	Upper Cumberland River	Laurel	7.80	8.90	37.01931	-84.17911	37.02737	-84.16690	2020
KY-569	KY490277_01	Rename			Craintown Branch 0.0 to 3.6	Mouth to Headwaters	River/Stream	490277	3.60 MILES	2002 5	Licking River	Fleming	0.00	3.60	38.37012	-83.79407	38.41270	-83.80331	2020
KY-2193	KY511620_01	Rename			Crane Creek 0.0 to 5.4	Mouth to Headwaters	River/Stream	511620	5.40 MILES	2004 5	Kentucky River	Clay	0.00	5.40	37.28492	-83.67563	37.26970	-83.74944	2020
KY-2194	KY511622_01	Rename			Crane Creek 0.1 to 3.0	Mouth to 3rd Order Stream	River/Stream	511622	2.90 MILES	2004 5	Licking River	Fleming	0.10	3.00	38.28153	-83.57727	38.27461	-83.53074	2020
KY-570	KY490282_01	Rename			Crane Creek 1.3 to 1.9	Martins Fork Reservoir Backwaters to Headwaters	River/Stream	490282	0.60 MILES	2006 5	Upper Cumberland River	Harlan	1.30	1.90	36.75458	-83.28223	36.76063	-83.28934	2020
KY-2195	KY511625_01	Rename			Craney Creek 0.0 to 5.95	Mouth to Land Use Change	River/Stream	511625	5.95 MILES	2006 2	Licking River	Morgan, Rowan	0.00	5.95	38.06493	-83.35154	38.11540	-83.32149	2020
KY-2713					Craney Creek 10.7 to 11.35	UT to Headwaters	River/Stream	511625	0.65 MILES	2020 3	Licking River	Rowan	10.70	11.35	38.16874	-83.29469	38.17612	-83.29520	2020
KY-2196	KY511625_02	Rename			Craney Creek 5.9 to 10.7	Land Use Change to UT	River/Stream	511625	4.80 MILES	2002 2	Licking River	Rowan	5.90	10.70	38.11540	-83.32149	38.16874	-83.29469	2020
KY-571	KY490293_01	Rename			Cranks Creek 1.7 to 2.45	Martins Fork Reservoir Backwaters to Cranks Creek Lake	River/Stream	490293	0.75 MILES	2006 5	Upper Cumberland River	Harlan	1.70	2.45	36.73841	-83.24438	36.73836	-83.23781	2020
KY-572	KY490308_00	Rename			Crawford Lake	Lake Outlet to Lake Headwaters	Lake/Reservoir	490308	29 ACRES	2010 2	Ohio River	McCracken			37.19115	-88.88351	37.18868	-88.87487	2020
KY-2197	KY511639_01	Rename			Criscillis Branch 0.0 to 1.9	Mouth to Headwaters	River/Stream	511639	1.90 MILES	2002 2	Upper Cumberland River	McCreary, Whitley	0.00	1.90	36.62994	-84.23238	36.62337	-84.26154	2020
KY-573	KY490359_01	Rename			Crocus Creek 0.0 to 4.85	Mouth to West Fork Crocus Creek	River/Stream	490359	4.85 MILES	2020 2	Upper Cumberland River	Cumberland	0.00	4.85	36.86026	-85.31672	36.88651	-85.33012	2020
KY-575	KY490359_03	Rename			Crocus Creek 14.0 to 17.15	Harrods Fork to below Burns Creek	River/Stream	490359	3.15 MILES	2000 5	Upper Cumberland River	Adair, Cumberland	14.00	17.15	36.92196	-85.27307	36.95618	-85.27838	2020
KY-574	KY490359_02	Rename			Crocus Creek 4.9 to 14.0	West Fork of Crocus Creek to Harrods Fork	River/Stream	490359	9.10 MILES	2002 5	Upper Cumberland River	Cumberland	4.90	14.00	36.88651	-85.33012	36.92196	-85.27307	2020
KY-2201	KY511649_01	Rename			Crooked Creek 0.0 to 12.1	Mouth to Butler Creek	River/Stream	511649	12.10 MILES	2014 5	Ohio River	Crittenden	0.00	12.10	37.47034	-88.10938	37.39178	-88.06477	2020
KY-577	KY490376_01	Rename			Crooked Creek 0.0 to 3.05	Mouth to Headwaters	River/Stream	490376	3.05 MILES	2004 4A	Green River	Daviess	0.00	3.05	37.72519	-87.27982	37.68772	-87.26920	2020
KY-581	KY490381_01	Rename			Crooked Creek 0.0 to 5.6	Mouth to near unnamed fork	River/Stream	490381	5.60 MILES	2000 2	Ohio River	Lewis	0.00	5.60	38.63584	-83.64324	38.66196	-83.57128	2020
KY-2204	KY511650_01	Rename			Crooked Creek 0.0 to 6.45	Mouth to Headwaters	River/Stream	511650	6.45 MILES	2000 2	Kentucky River	Estill	0.00	6.45	37.67193	-83.99846	37.62889	-84.07129	2020
KY-578	KY490377_01	Rename			Crooked Creek 0.0 to 9.4	Mouth of Crooked Creek to Headwaters	River/Stream	490377	9.40 MILES	2020 4A	Licking River	Nicholas	0.00	9.40	38.45992	-84.09946	38.38018	-84.07167	2020
KY-2198	KY511648_01	Rename			Crooked Creek 0.2 to 6.6	UT to UT	River/Stream	511648	6.40 MILES	2008 4A	Upper Cumberland River	Rockcastle	0.20	6.60	37.35201	-84.22096	37.38652	-84.18860	2020
KY-580	KY490380_01	Rename			Crooked Creek 0.5 to 7.0	Jacks Branch to Ramey Branch	River/Stream	490380	6.50 MILES	2006 2	Licking River	Pendleton, Harrison	0.50	7.00	38.55812	-84.42556	38.53500	-84.46266	2020
KY-582	KY490382_01	Rename			Crooked Creek 1.0 to 10.1	Taylorsville Lake Backwater to Confluence with East Prong	River/Stream	490382	9.10 MILES	2000 2	Salt River	Anderson, Spencer	1.00	10.10	37.98819	-85.16707	38.02722	-85.10941	2020
KY-2757		Split	KY-2202	KY511649_02	Crooked Creek 12.1 to 18.1	Butler Creek to Rush Creek	River/Stream	511649	6.00 MILES	2020 5	Ohio River	Crittenden	12.10	18.10	37.39178	-88.06477	37.35915	-88.06775	2020
KY-2756		Split	KY-2202	KY511649_02	Crooked Creek 18.1 to 26.4	Rush Creek to City Lake Dam	River/Stream	511649	8.30 MILES	2014 5	Ohio River	Crittenden	18.10	26.40	37.35915	-88.06775	37.31036	-88.09180	2020
KY-576	KY490374_01	Rename			Crooked Creek 2.6 to 8.75	Energy Lake Backwaters to Headwaters	River/Stream	490374	6.15 MILES	2020 4C	Lower Cumberland River	Trigg	2.60	8.75	36.85193	-88.03311	36.78868	-88.06292	2020
KY-579	KY490379_01	Rename			Crooked Creek 4.55 to 13.1	Mud Run to Headwaters	River/Stream	490379	8.55 MILES	2000 5	Salt River	Bullitt	4.55	13.10	37.86706	-85.75028	37.89610	-85.63666	2020
KY-2199	KY511648_02	Rename			Crooked Creek 6.6 to 12.4	UT to Headwaters	River/Stream	511648	5.80 MILES	1998 4A	Upper Cumberland River	Rockcastle	6.60	12.40	37.38652	-84.18860	37.45567	-84.19183	2020
KY-2200	KY511648-4.6_01	Rename			Crooked Creek UT 0.0 to 0.85	Mouth to Headwaters	River/Stream	511648	0.85 MILES	2014 4A	Upper Cumberland River	Rockcastle	0.00	0.85	37.37287	-84.20598	37.38371	-84.20887	2020
KY-2203	KY511649-8.3_01	Rename			Crooked Creek UT 0.0 to 1.95	Mouth to Contiguous riparian zone	River/Stream	511649	1.95 MILES	2014 5	Ohio River	Crittenden	0.00	1.95	37.42076	-88.08946	37.40066	-88.10221	2020
KY-583	KY490420_01	Rename			Cruises Creek 0.0 to 8.7	Mouth to Sawyers Fork Confluence	River/Stream	490420	8.70 MILES	2012 5	Licking River	Kenton	0.00	8.70	38.85198	-84.46322	38.84837	-84.54020	2020
KY-2205	KY511669_01	Rename			Crystal Creek 0.0 to 2.3	Mouth to Threemile Branch	River/Stream	511669	2.30 MILES	2004 5	Kentucky River	Lee	0.00	2.30	37.57117	-83.71152	37.59936	-83.70008	2020
KY-2830		Split	KY-2631	KY517018_01	Cumberland River 0.0 to 10.15	Mouth to 0.2 River Miles Downstream of Hickory Creek	River/Stream	517018	10.15 MILES	2020 2	Lower Cumberland River	Livingston	0.00	10.15	37.14229	-88.41056	37.18554	-88.30832	2020
KY-2832		Split	KY-2631	KY517018_01	Cumberland River 10.15 to 12.4	0.2 River Miles Downstream of Hickory Creek to 0.6 River Miles Upstream of Sugar Creek	River/Stream	517018	2.25 MILES	2020 2	Lower Cumberland River	Livingston	10.15	12.40	37.18554	-88.30832	37.18578	-88.26806	2020
KY-2956		Split	KY-2831		Cumberland River 12.4 to 13.95	0.6 River Miles Upstream of Sugar Creek to Crittenden-Livingston Co Water	River/Stream	517018	1.55 MILES	2020 2	Lower Cumberland River	Livingston	12.40	13.95	37.18578	-88.26806	37.18495	-88.23976	2020
KY-2957		Split	KY-2831		Cumberland River 13.95 to 15.0	Crittenden-Livingston Co Water to 1 Mile Upstream	River/Stream	517018	1.05 MILES	2020 2	Lower Cumberland River	Livingston	13.95	15.00	37.18495	-88.23976	37.18318	-88.22110	2020
KY-2958		Split	KY-2831		Cumberland River 15.0 to 28.7	1 Mile Upstream of Crittenden-Livingston Co Water to Lake Barkley Dam	River/Stream	517018	13.70 MILES	2020 2	Lower Cumberland River	Lyon, Livingston, Crittenden	15.00	28.70	37.18318	-88.22110	37.01998	-88.22504	2020
KY-2949		Split	KY-2632	KY517018_01.1	Cumberland River 379.8 to 388.15	State Line to Monroe County Water District	River/Stream	517018	8.35 MILES	2020 5	Upper Cumberland River	Monroe	379.80	388.15	36.61481	-85.50217	36.69088	-85.56786	2020
KY-2948		Split	KY-2632	KY517018_01.1	Cumberland River 388.15 to 389.15	Monroe Water District to 1 Mile Upstream	River/Stream	517018	1.00 MILES	2020 2	Upper Cumberland River	Monroe	388.15	389.15	36.69088	-85.56786	36.70437	-85.57327	2020
KY-2952		Split	KY-2632	KY517018_01.1	Cumberland River 389.15 to 421.9	1 Mile Upstream of Monroe Water District to Burkesville Municipal Water Works	River/Stream	517018	32.75 MILES	2020 2	Upper Cumberland River	Cumberland, Monroe	389.15	421.90	36.70437	-85.57327	36.78709	-85.36423	2020
KY-2950		Split	KY-2632	KY517018_01.1	Cumberland River 421.9 to 422.9	Burkesville Municipal Water Works to 1 Mile Upstream	River/Stream	517018	1.00 MILES	2020 2	Upper Cumberland River	Cumberland	421.90	422.90	36.78709	-85.36423	36.79726	-85.35154	2020
KY-2951		Split	KY-2632	KY517018_01.1	Cumberland River 422.9 to 430.15	1 Mile upstream of Burkesville Municipal Water Works to Crocus Creek	River/Stream	517018	7.25 MILES	2020 5	Upper Cumberland River	Cumberland	422.90	430.15	36.79726	-85.35154	36.86023	-85.31670	2020
KY-2900					Cumberland River 430.15 to 454.55	Crocus Creek to Little Indian Creek	River/Stream	517018	24.40 MILES	2020 5	Upper Cumberland River	Cumberland, Clinton, Russell	430.15	454.55	36.86023	-85.31670	36.88510	-85.12866	2020
KY-2633	KY517018_01.3	Rename			Cumberland River 454.55 to 456	Little Indian Creek to Kendall Recreation Area Discharge	River/Stream	517018	1.45 MILES	2020 3	Upper Cumberland River	Russell	454.55	456.00	36.88510	-85.12866	36.87808	-85.15030	2020
KY-2634	KY517018_01.4	Rename			Cumberland River 456 to 456.7	Kendall Recreation Area Discharge to Lake Cumberland Dam	River/Stream	517018	0.70 MILES	2012 2	Upper Cumberland River	Russell	456.00	456.70	36.87808	-85.15030	36.86868	-85.14743	2020
KY-2727					Cumberland River 549.6 to 553.4	Kentucky Wild River Boundary to Cumberland Falls	River/Stream	517018	3.80 MILES	2020 3	Upper Cumberland River	Whitley, McCreary	549.60	553.40	36.87274	-84.32375	36.83876	-84.34499	2020
KY-2635	KY517018_03	Rename			Cumberland River 555.3 to 560.85	Cumberland Falls to Marsh Creek	River/Stream	517018	5.55 MILES	2020 2	Upper Cumberland River	Whitley, McCreary	555.30	560.85	36.83876	-84.34499	36.77820	-84.34860	2020
KY-2819		Split	KY-2636	KY517018_03.5	Cumberland River 560.85 to 566.1	Marsh Creek to Kentucky Wild River Boundary	River/Stream	517018	5.25 MILES	2020 5	Upper Cumberland River	McCreary, Whitley	560.85	566.10	36.77820	-84.34860	36.75173	-84.28413	2020
KY-2820		Split	KY-2636	KY517018_03.5	Cumberland River 566.1 to 566.6	Kentucky Wild River Boundary to Jellico Creek	River/Stream	517018	0.50 MILES	2008 5	Upper Cumberland River	Whitley	566.10	566.60	36.75173	-84.28413	36.75173	-84.27529	2020
KY-2637	KY517018_04	Rename			Cumberland River 581.35 to 582.35	Williamsburg Water Works to 1.0 mile upstream	River/Stream	517018	1.00 MILES	2012 2	Upper Cumberland River	Whitley	581.35	582.35	36.74587	-84.17031	36.74130	-84.15495	2020
KY-2905					Cumberland River 628.5 to 629.45	Barbourville Utility to 1 Mile Upstream	River/Stream	517018	0.95 MILES	2020 3	Upper Cumberland River	Knox	628.50	629.45	36.86361	-83.88361	36.84953	-83.88216	2020
KY-2904					Cumberland River 635.6 to 636.6	Knox County Utility to 1 Mile Upstream	River/Stream	517018	1.00 MILES	2020 3	Upper Cumberland River	Knox	635.60	636.60	36.83580	-83.81198	36.82688	-83.80231	2020
KY-2638	KY517018_06	Rename			Cumberland River 643.6 to 647.6	Fourmile Bridge (HWY 2014) to Pineville at HWY 66 Bridge	River/Stream	517018	4.00 MILES	2008 4A	Upper Cumberland River	Bell	643.60	647.60	36.79221	-83.74306	36.76426	-83.69283	2020
KY-2639	KY517018_08	Rename			Cumberland River 653.3 to 659.9	Yellow Creek to Brownies Creek	River/Stream	517018	6.60 MILES	2020 2	Upper Cumberland River	Bell	653.30	659.90	36.71985	-83.64194	36.75687	-83.58642	2020
KY-2640	KY517018_09	Rename			Cumberland River 668.3 to 675.8	Puckett Creek to Jesses Creek	River/Stream	517018	7.50 MILES	2006 5	Upper Cumberland River	Harlan, Bell	668.30	675.80	36.78714	-83.52511	36.82391	-83.45199	2020
KY-2641	KY517018_11	Rename			Cumberland River 677 to 688.9	Between confluences of Laurel Branch and Mile Branch (downstream of Wallins) to Martins Fork Cumberland River	River/Stream	517018	11.90 MILES	2020 5	Upper Cumberland River	Harlan	677.00	688.90	36.83196	-83.43678	36.84490	-83.32516	2020
KY-2642	KY517018-424.7_01	Rename			Cumberland River UT 0.0 to 2.15	Mouth to Headwaters	River/Stream	517018	2.15 MILES	2012 5	Upper Cumberland River	Cumberland	0.00	2.15	36.81725	-85.35188	36.83263	-85.32738	2020
KY-3138					Cumberland River UT 0.05 to 0.75	Lake Cumberland backwaters to headwaters	River/Stream	517018	0.70 MILES	2020 5	Upper Cumberland River	Pulaski	0.05	0.75	36.96521	-84.44093	36.96594	-84.43042	2020
KY-3134					Cumberland River UT 0.1 to 0.45	Lake Cumberland backwaters to headwaters	River/Stream	517018	0.35 MILES	2020 5	Upper Cumberland River	Pulaski	0.10	0.45	36.98619	-84.43715	36.98988	-84.43294	2020
KY-3135					Cumberland River UT 0.1 to 0.65	Lake Cumberland backwaters to headwaters	River/Stream	517018	0.55 MILES	2020 3	Upper Cumberland River	Pulaski	0.10	0.65	36.95428	-84.42967	36.96140	-84.42807	2020
KY-2643	KY517018-8.3_01	Rename			Cumberland River UT 0.1 to 2.7	Cumberland River backwaters to Headwaters	River/Stream	517018	2.60 MILES	2012 5	Lower Cumberland River	Livingston	0.10	2.70	37.19304	-88.33922	37.19288	-88.30652	2020
KY-585	KY490506_01	Rename			Currys Fork 0.0 to 4.8	Mouth to Confluence with North and South Fork Currys Fork	River/Stream	490506	4.80 MILES	2020 4A	Salt River	Oldham	0.00	4.80	38.30352	-85.44907	38.35737	-85.44007	2020
KY-2059	KY510016_00	Rename			Curtis Crum Reservoir (aka Martin County Resvr)	Dam to Lake Boundaries	Lake/Reservoir	510016	18 ACRES	2020 2	Big Sandy River	Martin			37.87907	-82.51836	37.88450	-82.52367	2020
KY-2206	KY511693_01	Rename			Cutshin Creek 9.8 to 10.75	Wooten Branch to Poundmill Branch	River/Stream	511693	0.95 MILES	2004 5	Kentucky River	Leslie	9.80	10.75	37.17814	-83.30447	37.16510	-83.30851	2020
KY-596	KY490527_01	Rename			Cypress Creek 0.0 to 3.3	Mouth to UT (receives Sturgis WWTP effluent)	River/Stream	490527	3.30 MILES	2020 5	Tradewater River	Union	0.00	3.30	37.52411	-87.99930	37.54336	-87.97606	2020
KY-588	KY490526_01	Rename			Cypress Creek 0.0 to 6.0	Mouth to Pond Drain	River/Stream	490526	6.00 MILES	2020 5	Green River	McLean	0.00	6.00	37.51404	-87.35003	37.48782	-87.28361	2020
KY-617	KY490528_01	Rename			Cypress Creek 0.0 to 6.25	Little Cypress Creek to Camp Creek	River/Stream	490528	6.25 MILES	2020 5	Tennessee River	Marshall	0.00	6.25	37.02990	-88.45074	37.03581	-88.37431	2020
KY-586	KY490524_01	Rename			Cypress Creek 0.1 to 6.1	Mouth (Cumberland River Backwaters) to Headwaters	River/Stream	490524	6.00 MILES	2008 5	Lower Cumberland River	Livingston	0.10	6.10	37.18219	-88.22368	37.13853	-88.24915	2020
KY-3279					Cypress Creek 11.5 to 12.8	I-24 to Little John Creek confluence	River/Stream	490528	1.30 MILES	2020 5	Tennessee River	Marshall	11.50	12.80	37.01390	-88.31240	36.99472	-88.31277	2020
KY-3280					Cypress Creek 12.8 to 13.7	above Little John Creek confluence to Stice Creek Confluence	River/Stream	490528	0.90 MILES	2020 5	Tennessee River	Marshall	12.80	13.70	36.99468	-88.31277	36.98135	-88.31303	2020
KY-3281					Cypress Creek 13.7 to 14.85	above Stice Creek confluence to UT above English Rd. bridge	River/Stream	490528	1.15 MILES	2020 5	Tennessee River	Marshall	13.70	14.85	36.98130	-88.31302	36.96484	-88.31341	2020
KY-589	KY490526_02	Rename			Cypress Creek 23.1 to 26.5	KY 81 to KY 70	River/Stream	490526	3.40 MILES	2010 5	Green River	Muhlenberg	23.10	26.50	37.33937	-87.16123	37.30349	-87.19718	2020
KY-590	KY490526_03	Rename			Cypress Creek 26.5 to 33.6	Wetlands (SR 70) to Headwaters	River/Stream	490526	7.10 MILES	2010 5	Green River	Muhlenberg	26.50	33.60	37.30349	-87.19718	37.23512	-87.22846	2020
KY-597	KY490527_02	Rename			Cypress Creek 3.3 to 10.85	UT to Dennis O'Nan Ditch	River/Stream	490527	7.55 MILES	2014 5	Tradewater River	Union	3.30	10.85	37.54336	-87.97607	37.60475	-88.06203	2020
KY-618	KY490528_02	Rename			Cypress Creek 6.25 to 7.8	Camp Creek to UT	River/Stream	490528	1.55 MILES	2020 5	Tennessee River	Marshall	6.25	7.80	37.03581	-88.37431	37.03646	-88.35773	2020
KY-619	KY490528_03	Rename			Cypress Creek 7.8 to 9.7	UT to Drainage Canal	River/Stream	490528	1.90 MILES	2002 5	Tennessee River	Marshall	7.80	9.70	37.03646	-88.35773	37.02910	-88.32717	2020
KY-3278					Cypress Creek UT 0.0 to 0.8	mouth to headwaters	River/Stream	490528	0.80 MILES	2020 2	Tennessee River	Marshall	0.00	0.80	37.03742	-88.37019	37.04065	-88.35792	2020
KY-595	KY490526-29.5_01	Rename			Cypress Creek UT 0.0 to 1.1	Mouth to Headwaters	River/Stream	490526	1.10 MILES	2010 5	Green River	Muhlenberg	0.00	1.10	37.28522	-87.24076	37.29090	-87.25845	2020
KY-3276					Cypress Creek UT 0.0 to 1.4	mouth to headwaters	River/Stream	490528	1.40 MILES	2020 5	Tennessee River	Marshall	0.00	1.40	37.03793	-88.38220	37.04506	-88.36215	2020
KY-594	KY490526-28.6_01	Rename			Cypress Creek UT 0.0 to 1.45	Mouth to UT	River/Stream	490526	1.45 MILES	2010 5	Green River	Muhlenberg	0.00	1.45	37.29128	-87.22608	37.30492	-87.24511	2020
KY-3277					Cypress Creek UT 0.0 to 1.5	mouth to headwaters	River/Stream	490528	1.50 MILES	2020 5	Tennessee River	Marshall	0.00	1.50	37.03712	-88.38098	37.02279	-88.38603	2020
KY-3274					Cypress Creek UT 0.0 to 2.75	Mouth to headwaters	River/Stream	490528	2.75 MILES	2020 5	Tennessee River	Marshall	0.00	2.75	37.02261	-88.43967	37.04312	-88.40304	2020
KY-593	KY490526-26.3_01	Rename			Cypress Creek UT 0.0 to 3.0	Mouth to Pond	River/Stream	490526	3.00 MILES	2010 4A	Green River	Muhlenberg	0.00	3.00	37.30603	-87.19595	37.32105	-87.22016	2020
KY-592	KY490526-26.1_01	Rename			Cypress Creek UT 0.0 to 3.4	Mouth to Headwaters	River/Stream	490526	3.40 MILES	2010 5	Green River	Muhlenberg	0.00	3.40	37.30767	-87.19358	37.26637	-87.21166	2020
KY-587	KY490525-2.7_01	Rename			Cypress Creek UT 0.0 to 4.0	Cypress Creek to Headwaters	River/Stream	490525	4.00 MILES	2012 5	Mississippi River	Hickman	0.00	4.00	36.71612	-88.85504	36.67611	-88.85880	2020
KY-591	KY490526-16.8_01	Rename			Cypress Creek UT 0.0 to 8.1	Mouth to Headwaters	River/Stream	490526	8.10 MILES	2008 5	Green River	Muhlenberg, McLean	0.00	8.10	37.41435	-87.20607	37.41795	-87.27006	2020
KY-3275					Cypress Creek UT 0.1 to 1.3	Above confluence of UT to UT to the headwaters	River/Stream	490528	1.20 MILES	2020 5	Tennessee River	Marshall	0.10	1.30	37.04256	-88.39224	37.04704	-88.37316	2020
KY-616	KY490527-5.0-1.1_01	Rename			Cypress Creek UT of UT 0.0 to 0.1	Mouth to Point of Discharge	River/Stream	490527	0.10 MILES	2014 3	Tradewater River	Union	0.00	0.10	37.56608	-87.98031	37.56552	-87.97953	2020
KY-620	KY490538_00	Rename			Dale Hollow Lake	Kentucky portion of, including Spring Creek Embayment, Wolf River Embayment, and Sulphur Creek Embayment	Lake/Reservoir	490538	4333 ACRES	2020 2	Upper Cumberland River	Cumberland, Clinton			36.62413	-85.32565	36.62485	-85.17018	2020
KY-621	KY490545_01	Rename			Damon Creek 0.0 to 1.8	Mouth to Dam	River/Stream	490545	1.80 MILES	2020 4A	Tennessee River	Calloway	0.00	1.80	36.72216	-88.46211	36.71483	-88.43617	2020
KY-3271					Damon Creek 2.1 to 4.65	pond backwaters to headwaters	River/Stream	490545	2.55 MILES	2020 5	Tennessee River	Calloway	2.10	4.65	36.71356	-88.43207	36.68894	-88.40599	2020
KY-622	KY490568_01	Rename			Daniels Branch 0.0 to 0.4	Mouth to Headwaters	River/Stream	490568	0.40 MILES	2008 2	Big Sandy River	Pike	0.00	0.40	37.55565	-82.08034	37.55002	-82.07978	2020
KY-623	KY490575_01	Rename			Daniels Creek 0.0 to 5.75	Mouth to Headwaters	River/Stream	490575	5.75 MILES	2004 5	Green River	Breckinridge	0.00	5.75	37.64066	-86.55283	37.70661	-86.52168	2020
KY-624	KY490588_01	Rename			Darby Creek 0.0 to 1.3	Mouth to South Fork Darby Creek	River/Stream	490588	1.30 MILES	2016 5	Ohio River	Oldham	0.00	1.30	38.39016	-85.52225	38.39072	-85.50089	2020
KY-625	KY490588_02	Rename			Darby Creek 1.3 to 3.4	South Fork Darby Creek to UT	River/Stream	490588	2.10 MILES	2016 5	Ohio River	Oldham	1.30	3.40	38.39072	-85.50089	38.40179	-85.47273	2020
KY-626	KY490588_03	Rename			Darby Creek 3.4 to 5.9	UT to Headwaters	River/Stream	490588	2.50 MILES	2016 5	Ohio River	Oldham	3.40	5.90	38.40179	-85.47273	38.38829	-85.43928	2020
KY-627	KY490589_01	Rename			Darby Fork 0.0 to 1.55	Mouth to Near Mouth of UT/Land Use Change	River/Stream	490589	1.55 MILES	2016 5	Ohio River	Oldham	0.00	1.55	38.38239	-85.49323	38.38014	-85.46841	2020
KY-628	KY490589_02	Rename			Darby Fork 1.55 to 2.85	Near UT/Land Use Change to Headwaters	River/Stream	490589	1.30 MILES	2016 5	Ohio River	Oldham	1.55	2.85	38.38014	-85.46841	38.37145	-85.44936	2020
KY-629	KY490622_01	Rename			David Fork 0.0 to 1.8	North Elkhorn Creek to UT to David Fork	River/Stream	490622	1.80 MILES	2010 4A	Kentucky River	Fayette	0.00	1.80	38.06994	-84.41213	38.05563	-84.39689	2020
KY-630	KY490641_01	Rename			Davis Branch 0.0 to 2.8	Mouth to Headwaters	River/Stream	490641	2.80 MILES	2002 2	Upper Cumberland River	Bell	0.00	2.80	36.60574	-83.69090	36.63875	-83.68816	2020
KY-2207	KY511763_01	Rename			Deep Ford Branch 0.3 to 1.1	Above Pond to Headwaters	River/Stream	511763	0.80 MILES	2010 2	Kentucky River	Leslie	0.30	1.10	37.19084	-83.34744	37.18064	-83.34900	2020
KY-631	KY490770_01	Rename			Deer Creek 0.0 to 8.1	Mouth to below Coefield Creek	River/Stream	490770	8.10 MILES	2004 5	Ohio River	Livingston, Crittenden	0.00	8.10	37.40329	-88.35855	37.36668	-88.30158	2020
KY-632	KY490771_01	Rename			Deer Creek 0.0 to 8.4	Mouth to Knoblick Creek	River/Stream	490771	8.40 MILES	2020 5	Green River	Webster	0.00	8.40	37.59261	-87.45655	37.56183	-87.53740	2020
KY-633	KY490771_02	Rename			Deer Creek 8.4 to 17.8	Knoblick Creek to SR 630 Bridge	River/Stream	490771	9.40 MILES	2008 2	Green River	Webster	8.40	17.80	37.56183	-87.53740	37.47182	-87.61582	2020
KY-634	KY490786_01	Rename			Defeated Creek 0.5 to 2.0	Reservoir to source	River/Stream	490786	1.50 MILES	2010 5	Kentucky River	Knott	0.50	2.00	37.21600	-82.97798	37.19516	-82.97389	2020
KY-635	KY490816_01	Rename			Dennis O'Nan Ditch 0.2 to 5.2	Ohio River backwater to Cypress Creek	River/Stream	490816	5.00 MILES	2020 5	Ohio River	Union	0.20	5.20	37.55979	-88.10101	37.60471	-88.06212	2020
KY-636	KY490828_01	Rename			Deserter Creek 0.0 to 3.1	Mouth to UT	River/Stream	490828	3.10 MILES	2010 5	Green River	Daviess, Ohio	0.00	3.10	37.62451	-86.92610	37.64619	-86.87879	2020
KY-2208	KY511798_01	Rename			Devils Fork 0.0 to 8.7	Mouth to Headwaters	River/Stream	511798	8.70 MILES	2010 2	Licking River	Elliott, Morgan	0.00	8.70	38.04413	-83.30378	38.11882	-83.24506	2020
KY-637	KY490849_00	Rename			Dewey Lake	Dam to Lake Boundaries	Lake/Reservoir	490849	1063 ACRES	2016 2	Big Sandy River	Floyd			37.73562	-82.72918	37.16504	-82.63857	2020
KY-2209	KY511810_01	Rename			Difficulty Creek 0.0 to 3.6	Mouth to Headwaters	River/Stream	511810	3.60 MILES	1998 2	Upper Cumberland River	McCreary	0.00	3.60	36.60016	-84.60444	36.61571	-84.65551	2020
KY-638	KY490906_01	Rename			Dismal Creek 0.0 to 3.25	Mouth to Headwaters	River/Stream	490906	3.25 MILES	2008 2	Green River	Edmonson	0.00	3.25	37.27454	-86.24977	37.30999	-86.27353	2020
KY-2650	KY517054_01	Rename			Dix River 0.0 to 3.0	Mouth to dam/ hydro plant discharge	River/Stream	517054	3.00 MILES	2016 2	Kentucky River	Mercer, Garrard	0.00	3.00	37.81545	-84.71672	37.78644	-84.70274	2020
KY-2298	KY517054_02	Rename			Dix River 34.7 to 36.2	Backwaters of Herrington Lake to Hanging Fork	River/Stream	517054	1.50 MILES	2016 2C	Kentucky River	Garrard, Boyle	34.70	36.20	37.64199	-84.65843	37.63467	-84.65842	2020
KY-2299	KY517054_03	Rename			Dix River 36.2 to 43.8	Hanging Fork to White Oak Creek	River/Stream	517054	7.60 MILES	2008 4A	Kentucky River	Lincoln, Garrard	36.20	43.80	37.63467	-84.65842	37.59309	-84.61844	2020
KY-2300	KY517054_04	Rename			Dix River 64.3 to 73.95	Drakes Creek To Copper Creek	River/Stream	517054	9.65 MILES	2008 4A	Kentucky River	Lincoln	64.30	73.95	37.50359	-84.53469	37.45451	-84.47253	2020
KY-2651	KY517054_05	Rename			Dix River 73.95 to 79.3	Copper Creek to 0.15 miles below Brodhead STP	River/Stream	517054	5.35 MILES	2010 4A	Kentucky River	Lincoln, Rockcastle	73.95	79.30	37.45451	-84.47253	37.40815	-84.42126	2020
KY-3269					Doan Spring	Entire springshed of Doan Spring	Spring	90001854	1903 ACRES	2020 5	Lower Cumberland River	Crittenden			37.22741	-88.17452	37.23885	-88.13175	2020
KY-3270					Doan Spring Creek UT 0.0 to 2.3	Sink to headwaters	River/Stream	490938	2.30 MILES	2020 5	Lower Cumberland River	Crittenden	0.00	2.30	37.23844	-88.15786	37.23093	-88.13935	2020
KY-639	KY490950_01	Rename			Doctors Fork 0.0 to 3.8	Mouth to Begley Branch	River/Stream	490950	3.80 MILES	2020 2	Salt River	Boyle	0.00	3.80	37.67567	-84.96085	37.64612	-84.99949	2020
KY-2877		Split	KY-640	KY490968_01	Doe Run 5.2 to 8.3	KY-1638 Old Mill Road to Headwaters	River/Stream	490968	3.10 MILES	2020 5	Ohio River	Meade	5.20	8.30	37.95830	-86.12196	37.93535	-86.12510	2020
KY-2694	KYCLN082_00	Rename			Doe Run Lake	Entire Reservoir	Lake/Reservoir	82	49 ACRES	2012 5	Licking River	Kenton			38.98802	-84.55151	38.98906	-84.56727	2020
KY-2210	KY511851_01	Rename			Dog Fork 0.0 to 2.65	Mouth to Headwaters	River/Stream	511851	2.65 MILES	2000 2	Kentucky River	Wolfe	0.00	2.65	37.78481	-83.56667	37.77183	-83.60714	2020
KY-2211	KY511853_01	Rename			Dog Slaughter Creek 0.0 to 1.2	Mouth to North and South Fork of Dog Slaughter Creek	River/Stream	511853	1.20 MILES	2012 2	Upper Cumberland River	Whitley	0.00	1.20	36.85953	-84.31480	36.85930	-84.30072	2020
KY-641	KY490999_01	Rename			Donaldson Creek 0.0 to 14.2	Mouth to West Fork of Donaldson Creek	River/Stream	490999	14.20 MILES	2020 5	Tradewater River	Caldwell	0.00	14.20	37.28704	-87.79560	37.25033	-87.92074	2020
KY-642	KY490999_02	Rename			Donaldson Creek 16.55 to 23.05	Goose Creek to Black Creek	River/Stream	490999	6.50 MILES	2014 5	Tradewater River	Caldwell	16.55	23.05	37.23880	-87.90908	37.18747	-87.92510	2020
KY-644	KY491000_01	Rename			Donaldson Creek 3.1 to 6.2	Backwaters of Lake Barkley to Loss of Riparian Zone / end of OSRW Segment	River/Stream	491000	3.10 MILES	2012 2	Lower Cumberland River	Trigg	3.10	6.20	36.74924	-87.91006	36.75013	-87.86828	2020
KY-645	KY491000_02	Rename			Donaldson Creek 6.2 to 10.75	UT to headwaters	River/Stream	491000	4.55 MILES	2002 5	Lower Cumberland River	Trigg	6.20	10.75	36.75013	-87.86828	36.77467	-87.81314	2020
KY-643	KY490999-18.7_01	Rename			Donaldson Creek UT 0.0 to 1.8	Mouth to Headwaters	River/Stream	490999	1.80 MILES	2008 5	Tradewater River	Caldwell	0.00	1.80	37.22543	-87.90662	37.20619	-87.90335	2020
KY-646	KY491017_01	Rename			Dorridge Creek 0.0 to 3.45	From mouth to Meadows Creek	River/Stream	491017	3.45 MILES	2010 2	Ohio River	Breckinridge	0.00	3.45	37.83750	-86.46232	37.81465	-86.42247	2020
KY-647	KY491020_01	Rename			Dorsey Run 2.1 to 3.9	Above UT to 0.7 Miles East of I-65	River/Stream	491020	1.80 MILES	2004 5	Green River	Hardin, Larue	2.10	3.90	37.51875	-85.90226	37.50880	-85.87814	2020
KY-648	KY491020-2.6_01	Rename			Dorsey Run UT 0.0 to 0.9	Mouth to Pilot Travel Center Discharge	River/Stream	491020	0.90 MILES	2008 3	Green River	Hardin	0.00	0.90	37.51456	-85.89720	37.51836	-85.88599	2020
KY-36	KY2355192_01	Rename			Doty Branch 0.0 to 2.25	Mouth to Headwaters	River/Stream	2355192	2.25 MILES	1998 5	Licking River	Fleming	0.00	2.25	38.38231	-83.82221	38.41046	-83.81249	2020
KY-649	KY491044_01	Rename			Double Lick Creek 0.0 to 3.55	Mouth to Headwaters	River/Stream	491044	3.55 MILES	2016 2	Ohio River	Boone	0.00	3.55	39.03416	-84.78650	39.07525	-84.76777	2020
KY-651	KY491096_01	Rename			Drakes Creek 0.0 to 23.4	Mouth to Middle and West Fork of Drakes Creek	River/Stream	491096	23.40 MILES	2020 5	Green River	Warren	0.00	23.40	36.98130	-86.36785	36.83872	-86.41301	2020
KY-652	KY491097_01	Rename			Drakes Creek 0.0 to 8.9	Mouth to Pleasant Run	River/Stream	491097	8.90 MILES	2006 4A	Green River	Hopkins	0.00	8.90	37.25726	-87.38814	37.19119	-87.42263	2020
KY-650	KY491093_01	Rename			Drakes Creek 1.2 to 7.25	Above Hammons Lick To Headwaters	River/Stream	491093	6.05 MILES	2008 4A	Kentucky River	Lincoln, Garrard	1.20	7.25	37.50464	-84.51872	37.57626	-84.52468	2020
KY-653	KY491097-9.8_01	Rename			Drakes Creek UT 0.0 to 2.2	Mouth to Headwaters	River/Stream	491097	2.20 MILES	2008 5	Green River	Hopkins	0.00	2.20	37.18827	-87.43061	37.18288	-87.46449	2020
KY-655	KY491110_02	Rename			Drennon Creek 16.7 to 22.35	3rd Order UT to Headwaters	River/Stream	491110	5.65 MILES	2016 5	Kentucky River	Henry	16.70	22.35	38.39936	-85.10323	38.35201	-85.10127	2020
KY-654	KY491110_01	Rename			Drennon Creek 8.7 to 12.15	Fivemile Creek to Town Creek	River/Stream	491110	3.45 MILES	2020 2	Kentucky River	Henry	8.70	12.15	38.46577	-85.09825	38.43094	-85.11912	2020
KY-656	KY491129_01	Rename			Drowning Creek 0.05 to 9.4	Kentucky River Backwaters to Oldham Branch	River/Stream	491129	9.35 MILES	2010 2	Kentucky River	Estill, Madison	0.05	9.40	37.74850	-84.08091	37.65871	-84.10847	2020
KY-657	KY491160_01	Rename			Dry Branch 0.0 to 0.4	Mouth to Rainbow Terra MHP STP	River/Stream	491160	0.40 MILES	2002 3	Upper Cumberland River	Pulaski	0.00	0.40	37.11828	-84.59312	37.12148	-84.59735	2020
KY-3286					Dry Creek 0.0 to 2.25	Sink to UT with Crodson Creek	River/Stream	491177	2.25 MILES	2020 5	Lower Cumberland River	Livingston, Crittenden	0.00	2.25	37.23779	-88.21392	37.26236	-88.21228	2020
KY-662	KY491176_01	Rename			Dry Creek 0.0 to 3.65	Mouth to Dry Fork Creek	River/Stream	491176	3.65 MILES	2012 5	Lower Cumberland River	Caldwell	0.00	3.65	37.03264	-87.93898	37.02491	-87.88700	2020
KY-658	KY491166_01	Rename			Dry Creek 0.0 to 4.2	Mouth to Headwaters	River/Stream	491166	4.20 MILES	2010 5	Big Sandy River	Knott	0.00	4.20	37.35996	-82.78948	37.32096	-82.75180	2020
KY-661	KY491173_01	Rename			Dry Creek 0.0 to 4.55	Mouth to Bull Run Creek	River/Stream	491173	4.55 MILES	2004 5	Green River	Adair, Casey	0.00	4.55	37.26616	-85.14951	37.32024	-85.13320	2020
KY-2212	KY511917_01	Rename			Dry Creek 0.0 to 4.9	Mouth to Forested Reach	River/Stream	511917	4.90 MILES	2016 5	Licking River	Rowan	0.00	4.90	38.16382	-83.42955	38.15661	-83.35277	2020
KY-659	KY491168_01	Rename			Dry Creek 0.1 to 6.95	Ohio River backwater to Headwaters	River/Stream	491168	6.85 MILES	2000 5	Ohio River	Kenton, Boone	0.10	6.95	39.06940	-84.62440	39.02180	-84.57293	2020
KY-663	KY491178_01	Rename			Dry Creek 1.1 to 3.2	Ohio River Backwaters to mouth of First UT	River/Stream	491178	2.10 MILES	2000 5	Ohio River	Gallatin	1.10	3.20	38.77290	-84.90630	38.76899	-84.87512	2020
KY-3287					Dry Creek 2.25 to 6.5	UT with Crodson Creek to headwaters	River/Stream	491177	4.25 MILES	2020 5	Lower Cumberland River	Crittenden	2.25	6.50	37.26236	-88.21228	37.29833	-88.16508	2020
KY-3288					Dry Creek UT 0.0 to 2.0	Mouth to pond near headwaters	River/Stream	491177	2.00 MILES	2020 5	Lower Cumberland River	Crittenden, Livingston	0.00	2.00	37.25486	-88.21469	37.25329	-88.19040	2020
KY-660	KY491170-4.6_01	Rename			Dry Creek UT 0.0 to 2.9	Mouth to Impoundment	River/Stream	491170	2.90 MILES	2008 5	Lower Cumberland River	Trigg	0.00	2.90	36.69784	-87.84605	36.70491	-87.80912	2020
KY-665	KY491204_01	Rename			Dry Fork 0.0 to 0.45	Mouth to Susan Creek	River/Stream	491204	0.45 MILES	2014 5	Ohio River	Crittenden	0.00	0.45	37.38464	-88.30495	37.38282	-88.29821	2020
KY-3139					Dry Fork 0.0 to 2.1	Mouth to mine portal	River/Stream	491202	2.10 MILES	2020 5	Kentucky River	Letcher	0.00	2.10	37.12096	-82.87623	37.14230	-82.85508	2020
KY-2213	KY511923_01	Rename			Dry Fork 0.0 to 3.0	Mouth to UT @ Sand Springs	River/Stream	511923	3.00 MILES	2000 2	Upper Cumberland River	Rockcastle	0.00	3.00	37.25783	-84.36130	37.29686	-84.35951	2020
KY-664	KY491181_01	Rename			Dry Fork 0.0 to 7.3	Mouth to Headwaters	River/Stream	491181	7.30 MILES	2014 5	Lower Cumberland River	Logan	0.00	7.30	36.78060	-86.97850	36.83061	-86.93936	2020
KY-3198					Dry Fork 0.0 to 8.35	Mouth to Headwaters	River/Stream	491203	8.35 MILES	2020 4C	Lower Cumberland River	Crittenden	0.00	8.35	37.17893	-88.10020	37.26360	-88.09191	2020
KY-666	KY491206_01	Rename			Dry Fork 1.2 to 4.5	Lost Creek to Caney Fork	River/Stream	491206	3.30 MILES	2004 5	Little Sandy River	Carter, Lawrence	1.20	4.50	38.20746	-82.89048	38.17858	-82.87302	2020
KY-3140					Dry Fork 2.1 to 4.55	Mine portal to headwaters	River/Stream	491202	2.45 MILES	2020 5	Kentucky River	Letcher	2.10	4.55	37.14230	-82.85507	37.16967	-82.83570	2020

KY-3301		Split	KY-771	KY492236_04	Fleming Creek 26.2 to 39.35	Town Branch to Headwater	River/Stream	492236	13.15 MILES	2020 5	Licking River	Fleming	26.20	39.35	38.40738	-83.71717	38.44075	-83.60636	2020
KY-772	KY492236-4.4_01	Rename			Fleming Creek UT 0.0 to 2.1	Mouth to Headwaters	River/Stream	492236	2.10 MILES	2002 4A	Licking River	Fleming	0.00	2.10	38.38121	-83.89732	38.40465	-83.89863	2020
KY-1895	KY505381-2.1-A_00	Rename			Flemingsburg Lake (aka Flemingsburg Reservoir New)	Entire reservoir	Lake/Reservoir	274	66 ACRES	2012 2	Licking River	Fleming			38.42760	-83.75194	38.42407	-83.76635	2020
KY-773	KY492268_01	Rename			Flour Creek 0.0 to 2.2	Mouth to UT	River/Stream	492268	2.20 MILES	2006 2	Licking River	Pendleton	0.00	2.20	38.78904	-84.34401	38.80192	-84.32458	2020
KY-774	KY492278_01	Rename			Floyds Fork 0.0 to 11.7	Mouth to Wells Run	River/Stream	492278	11.70 MILES	2020 4A	Salt River	Bullitt	0.00	11.70	37.99840	-85.67787	38.06147	-85.60344	2020
KY-775	KY492278_02	Rename			Floyds Fork 11.7 to 24.2	Wells Run to Chenoweth Run	River/Stream	492278	12.50 MILES	2014 5	Salt River	Jefferson, Bullitt	11.70	24.20	38.06147	-85.60344	38.13096	-85.52637	2020
KY-776	KY492278_03	Rename			Floyds Fork 24.2 to 34.2	Chenoweth Run to Long Run	River/Stream	492278	10.00 MILES	2020 4A	Salt River	Jefferson	24.20	34.20	38.13105	-85.52621	38.19834	-85.47002	2020
KY-601	KY492278_04	Rename			Floyds Fork 34.2 to 40.1	Long Run to Chenoweth Run	River/Stream	492278	5.90 MILES	2014 4A	Salt River	Jefferson	34.20	40.10	38.19857	-85.46967	38.19834	-85.47002	2020
KY-602	KY492278_05	Rename			Floyds Fork 40.1 to 45.7	Chenoweth Run to UT at Jefferson-Shelby County Line	River/Stream	492278	5.60 MILES	2014 4A	Salt River	Jefferson	40.10	45.70	38.24657	-85.47365	38.28527	-85.46794	2020
KY-603	KY492278_06	Rename			Floyds Fork 45.7 to 61.9	UT at County Line to Headwaters	River/Stream	492278	16.20 MILES	2014 5	Salt River	Oldham, Shelby	45.70	61.90	38.28527	-85.46794	38.35629	-85.31636	2020
KY-604	KY492287_01	Rename			Flynn Fork 1.9 to 7.1	UT/ Riparian Cover to Riparian Cover	River/Stream	492287	5.20 MILES	2014 5	Tradewater River	Caldwell	1.90	7.10	37.18583	-87.75683	37.16742	-87.79266	2020
KY-2758		Split	KY-605	KY492299_01	Forbes Creek 0.0 to 4.4	Mouth to Unnamed Tributary (0.3 River Miles Downstream of CR-1021 Owen West Road)	River/Stream	492299	4.40 MILES	2014 2	Green River	Christian	0.00	4.40	36.98832	-87.32847	36.95495	-87.34872	2020
KY-2759		Split	KY-605	KY492299_01	Forbes Creek 4.4 to 7.45	Unnamed Tributary (0.3 River Miles Downstream of CR-1021 Owen West Road) to Headwaters	River/Stream	492299	3.05 MILES	2020 2	Green River	Christian	4.40	7.45	36.95495	-87.34872	36.92370	-87.35612	2020
KY-777	KY492307_01	Rename			Ford Ditch 0.0 to 3.65	Mouth to Headwaters	River/Stream	492307	3.65 MILES	2004 5	Green River	Daviess	0.00	3.65	37.65970	-87.14173	37.61279	-87.13454	2020
KY-778	KY492332_01	Rename			Foresters Creek 0.0 to 5.1	Mouth to Headwaters	River/Stream	492332	5.10 MILES	2008 2	Upper Cumberland River	Harlan	0.00	5.10	36.82849	-83.46838	36.77520	-83.43009	2020
KY-780	KY492390_01	Rename			Fourmile Creek 0.2 to 8.3	Ohio River Backwaters to UT (Pump station)	River/Stream	492390	8.10 MILES	2020 5	Ohio River	Campbell	0.20	8.30	39.04463	-84.42017	38.96905	-84.37411	2020
KY-779	KY492385_01	Rename			Fourmile Creek 1.7 to 4.85	UT to Headwaters	River/Stream	492385	3.15 MILES	2002 2	Upper Cumberland River	Bell	1.70	4.85	36.79611	-83.71788	36.83031	-83.70547	2020
KY-781	KY492390_02	Rename			Fourmile Creek 8.3 to 9.55	UT to Headwaters	River/Stream	492390	1.25 MILES	2002 2	Ohio River	Campbell	8.30	9.55	38.96905	-84.37411	38.97196	-84.39202	2020
KY-782	KY492390-4.7-0.1_01	Rename			Fourmile Creek UT of UT 0.0 to 0.5	Mouth to discharge into UT	River/Stream	492390	0.50 MILES	2012 3	Ohio River	Campbell	0.00	0.50	39.01091	-84.36581	39.01610	-84.36369	2020
KY-783	KY492391_01	Rename			Fourmile Run 0.65 to 2.65	Above UT to Headwaters	River/Stream	492391	2.00 MILES	2002 2	Upper Cumberland River	Bell	0.65	2.65	36.63953	-83.72626	36.66338	-83.73840	2020
KY-784	KY492398_01	Rename			Fowlers Fork 0.0 to 4.1	Mouth to Headwaters	River/Stream	492398	4.10 MILES	2016 5	Ohio River	Boone	0.00	4.10	38.97794	-84.69433	38.92982	-84.67773	2020
KY-2228	KY512230_01	Rename			Fox Creek 0.0 to 10.1	Mouth to Rock Lick Creek	River/Stream	512230	10.10 MILES	2020 5	Licking River	Fleming	0.00	10.10	38.26038	-83.68710	38.24360	-83.60063	2020
KY-2229	KY512230_02	Rename			Fox Creek 10.1 to 16.1	Rock Lick Creek to Crane Creek	River/Stream	512230	6.00 MILES	2012 5	Licking River	Fleming	10.10	16.10	38.24360	-83.60063	38.28224	-83.57822	2020
KY-3201					Fox Creek 16.1 to 24.1	Crane Creek to Brushy Fork	River/Stream	512230	8.00 MILES	2020 5	Licking River	Fleming	16.10	24.10	38.28224	-83.57822	38.34431	-83.53793	2020
KY-2230	KY512230_03	Rename			Fox Creek 24.1 to 26.85	Brushy Fork to Sugar Tree Branch	River/Stream	512230	2.75 MILES	2000 5	Licking River	Fleming	24.10	26.85	38.34431	-83.53793	38.36439	-83.50301	2020
KY-785	KY492415_01	Rename			Fox Run 0.0 to 1.15	Mouth to Headwaters	River/Stream	492415	1.15 MILES	2008 5	Tradewater River	Hopkins	0.00	1.15	37.18518	-87.53958	37.20102	-87.54268	2020
KY-2706					Frames Branch 0.0 to 2.95	Mouth to nearly headwaters, as defined by TMDL	River/Stream	512238	2.95 MILES	2020 4A	Kentucky River	Powell	0.00	2.95	37.81508	-83.91771	37.80524	-83.95871	2020
KY-786	KY492462_01	Rename			Franks Creek 3.2 to 4.65	Little Fork to Headwaters	River/Stream	492462	1.45 MILES	2002 2	Upper Cumberland River	Letcher	3.20	4.65	37.03066	-82.80127	37.01347	-82.81493	2020
KY-787	KY492468_01	Rename			Frasure Creek 0.0 to 5.2	Mouth to Confluence with Buckhorn Fork and Poplar Lick Fork	River/Stream	492468	5.20 MILES	2010 5	Big Sandy River	Floyd	0.00	5.20	37.45399	-82.74049	37.40478	-82.69391	2020
KY-788	KY492490-2.4-1.0_01	Rename			Fredricks Ditch UT of UT 0.0 to 1.1	Mouth to Headwaters	River/Stream	492490	1.10 MILES	2008 3	Tradewater River	Webster	0.00	1.10	37.47572	-87.74646	37.48819	-87.73649	2020
KY-789	KY492490-2.4-1.1_01	Rename			Fredricks Ditch UT of UT 0.0 to 1.2	Mouth to Headwaters	River/Stream	492490	1.20 MILES	2008 5	Tradewater River	Webster	0.00	1.20	37.47511	-87.74574	37.48567	-87.73238	2020
KY-2231	KY512251_01	Rename			Freeman Fork 0.0 to 1.3	Mouth to Long Creek	River/Stream	512251	1.30 MILES	2016 5	Kentucky River	Breathitt	0.00	1.30	37.38760	-83.47734	37.38748	-83.49334	2020
KY-2056	KY509489_00	Rename			Freeman Lake	Dam to Upper Lake	Lake/Reservoir	509489	170 ACRES	2020 5	Green River	Hardin			37.71514	-85.86977	37.73146	-85.87225	2020
KY-790	KY492562_01	Rename			Frog Branch 0.0 to 3.4	Mouth to Headwaters	River/Stream	492562	3.40 MILES	2008 4A	Kentucky River	Lincoln	0.00	3.40	37.50499	-84.75844	37.51097	-84.81174	2020
KY-791	KY492574_01	Rename			Froman Creek 0.0 to 1.25	From mouth to Samuels Creek	River/Stream	492574	1.25 MILES	2012 4A	Salt River	Nelson	0.00	1.25	37.91362	-85.50310	37.90066	-85.49084	2020
KY-792	KY492582_01	Rename			Frozen Creek 0.05 to 5.55	Upstream Influence of North Fork Kentucky River (backwater) to Morgue Fork	River/Stream	492582	5.50 MILES	2016 5	Kentucky River	Breathitt	0.05	5.55	37.60337	-83.42483	37.62761	-83.37622	2020
KY-793	KY492582_02	Rename			Frozen Creek 5.55 to 14.2	Morgue Fork to Land Use Change (Taulbee Fork)	River/Stream	492582	8.65 MILES	2016 5	Kentucky River	Breathitt	5.55	14.20	37.62761	-83.37622	37.66042	-83.27341	2020
KY-2232	KY512261_01	Rename			Fugitt Creek 0.0 to 4.7	Mouth to Headwaters	River/Stream	512261	4.70 MILES	2012 2	Upper Cumberland River	Harlan	0.00	4.70	36.91126	-83.08635	36.91904	-83.01780	2020
KY-794	KY492618_01	Rename			Fulton Creek 2.3 to 2.75	Lake Backwaters to UT	River/Stream	492618	0.45 MILES	2016 2	Lower Cumberland River	Lyon	2.30	2.75	36.92371	-88.06055	36.92141	-88.06422	2020
KY-795	KY492618-1.9_01	Rename			Fulton Creek 2.8 to 5.8	UT to Headwaters	River/Stream	492618	3.00 MILES	2016 2	Lower Cumberland River	Lyon	2.80	5.80	36.92141	-88.06422	36.93095	-88.10470	2020
KY-796	KY492618-1.9-0.15_01	Rename			Fulton Creek UT 0.0 to 0.75	Mouth to Headwaters	River/Stream	492618	0.75 MILES	2016 2	Lower Cumberland River	Lyon	0.00	0.75	36.92196	-88.06655	36.91749	-88.07717	2020
KY-2663	KY90000157_00	Rename			Gardenside Spring	Entire springshed of Gardenside Spring	Spring	90000157	234 ACRES	2016 4A	Kentucky River	Fayette			38.03569	-84.54440	38.02313	-84.55771	2020
KY-797	KY492710_01	Rename			Garner Creek 0.0 to 1.9	Mouth to Jack Fork	River/Stream	492710	1.90 MILES	2004 5	Little Sandy River	Boyd	0.00	1.90	38.30802	-82.71732	38.29374	-82.73906	2020
KY-798	KY492731_01	Rename			Garrison Creek 0.3 to 4.95	Backwaters of the Ohio River to pond at headwaters	River/Stream	492731	4.65 MILES	2020 2	Ohio River	Boone	0.30	4.95	39.10369	-84.80716	39.11247	-84.76216	2020
KY-800	KY492748_02	Rename			Gasper River 14.6 to 17.2	Chism Creek to Clear Fork Creek	River/Stream	492748	2.60 MILES	2014 2	Green River	Warren	14.60	17.20	37.01280	-86.61376	36.98618	-86.63216	2020
KY-801	KY492748_03	Rename			Gasper River 17.2 to 35.65	Clear Fork Creek to Wiggington Creek	River/Stream	492748	18.45 MILES	2014 2	Green River	Warren, Logan	17.20	35.65	36.98618	-86.63216	36.91698	-86.74175	2020
KY-799	KY492748_01	Rename			Gasper River 7.75 to 14.6	Salt Lick Creek to Chism Creek	River/Stream	492748	6.85 MILES	2020 4A	Green River	Warren	7.75	14.60	37.04721	-86.58304	37.01280	-86.61377	2020
KY-802	KY492748-28.2_01	Rename			Gasper River UT 0.0 to 3.1	Mouth to Headwaters	River/Stream	492748	3.10 MILES	2008 2	Green River	Logan	0.00	3.10	36.97054	-86.70047	36.93981	-86.68348	2020
KY-2693	KYCLN081_00	Rename			General Butler State Park Lake	Dam to Lake boundaries	Lake/Reservoir	81	18 ACRES	2020 5	Kentucky River	Carroll			38.66459	-85.14837	38.66965	-85.14629	2020
KY-803	KY492787_01	Rename			Georges Creek 0.0 to 2.9	Levisa Fork to Confluence of Crestley Branch	River/Stream	492787	2.90 MILES	2010 5	Big Sandy River	Lawrence	0.00	2.90	37.97624	-82.66581	37.94257	-82.67675	2020
KY-804	KY492787_02	Rename			Georges Creek 2.9 to 6.5	Crestley Branch to Nelson Branch	River/Stream	492787	3.60 MILES	2010 2	Big Sandy River	Lawrence	2.90	6.50	37.94257	-82.67675	37.92358	-82.72235	2020
KY-806	KY492818_01	Rename			Gilbert Creek 0.0 to 2.6	Mouth to two UTs	River/Stream	492818	2.60 MILES	2006 2	Kentucky River	Anderson	0.00	2.60	37.97372	-84.81849	37.97575	-84.85331	2020
KY-805	KY492817_01	Rename			Gilbert Creek 1.65 to 3.5	Above US 45 to Below UT	River/Stream	492817	1.85 MILES	2002 5	Mississippi River	Graves	1.65	3.50	36.84252	-88.65913	36.83030	-88.68416	2020
KY-2233	KY512308_01	Rename			Gilberts Big Creek 0.0 to 6.75	Mouth to Headwaters	River/Stream	512308	6.75 MILES	2000 2	Kentucky River	Clay, Leslie	0.00	6.75	37.10785	-83.55591	37.09263	-83.46185	2020
KY-807	KY492821_01	Rename			Gilberts Creek 0.0 to 1.25	Mouth to Turkey Creek	River/Stream	492821	1.25 MILES	2008 4A	Kentucky River	Lincoln	0.00	1.25	37.57062	-84.61601	37.57083	-84.59567	2020
KY-808	KY492841_01	Rename			Gilles Ditch 0.0 to 5.4	Mouth to Headwaters	River/Stream	492841	5.40 MILES	2004 5	Green River	Daviess	0.00	5.40	37.76124	-87.22402	37.80088	-87.16171	2020
KY-809	KY492850_01	Rename			Gillmore Creek 0.0 to 5.2	Mouth to Straight Creek	River/Stream	492850	5.20 MILES	2002 2	Kentucky River	Wolfe	0.00	5.20	37.78751	-83.38850	37.73547	-83.36982	2020
KY-810	KY492855_01	Rename			Gilmore Creek 0.0 to 5.95	Mouth to Headwaters	River/Stream	492855	5.95 MILES	2008 5	Upper Cumberland River	Lincoln	0.00	5.95	37.34622	-84.57864	37.42131	-84.58744	2020
KY-2234	KY512325_01	Rename			Gladie Creek 0.5 to 7.25	Land use change to Long Branch and UT	River/Stream	512325	6.75 MILES	2010 2	Kentucky River	Menifee	0.50	7.25	37.83968	-83.60779	37.86994	-83.53192	2020
KY-3240					Gladie Spring	Entire springshed of Gladie Spring	Spring	90000379	6 ACRES	2020 3	Kentucky River	Menifee			37.83575	-83.60560	37.83754	-83.60352	2020
KY-811	KY492902_01	Rename			Glenns Creek 0.0 to 5.45	Mouth to UT of Glenns Creek	River/Stream	492902	5.45 MILES	1998 2	Kentucky River	Franklin, Woodford	0.00	5.45	38.15332	-84.85691	38.11224	-84.81594	2020
KY-3297					Glenns Creek 5.45 to 9.7	UT Glenns Creek to Camden Creek	River/Stream	492902	4.25 MILES	2020 5	Kentucky River	Woodford	5.45	9.70	38.11223	-84.81594	38.08334	-84.77366	2020
KY-812	KY492902-1.6_01	Rename			Glenns Creek UT 0.0 to 1.9	Mouth to Headwaters	River/Stream	492902	1.90 MILES	2006 2	Kentucky River	Woodford	0.00	1.90	38.14826	-84.83651	38.12764	-84.84718	2020
KY-813	KY492904_01	Rename			Glens Creek 0.0 to 4.8	Mouth to Danbow Creek Confluence	River/Stream	492904	4.80 MILES	2006 2	Salt River	Washington	0.00	4.80	37.86218	-85.12678	37.83210	-85.08823	2020
KY-814	KY492907_01	Rename			Glens Fork 0.0 to 7.15	Mouth to Headwaters	River/Stream	492907	7.15 MILES	2008 5	Green River	Adair	0.00	7.15	37.07476	-85.27306	36.99038	-85.24702	2020
KY-815	KY492978_01	Rename			Goodin Creek 2.1 to 2.6	Change in Land Use to Below UT	River/Stream	492978	0.50 MILES	2002 5	Upper Cumberland River	Knox	2.10	2.60	36.76545	-83.95864	36.76234	-83.95147	2020
KY-2665	KY90000230_00	Rename			Goodman Spring	Entire Springshed of Goodman Springs	Spring	90000230	9488 ACRES	2020 5	Green River	Hardin			37.48028	-86.04889	37.49333	-85.91772	2020
KY-820	KY493013_01	Rename			Goose Creek 0.0 to 1.9	Mouth to Ballard Branch	River/Stream	493013	1.90 MILES	2000 5	Kentucky River	Shelby	0.00	1.90	38.15772	-85.00597	38.14666	-85.03217	2020
KY-816	KY493006_01	Rename			Goose Creek 0.0 to 1.95	Mouth to McCarty Creek	River/Stream	493006	1.95 MILES	2000 5	Ohio River	Bracken	0.00	1.95	38.73465	-84.10205	38.71849	-84.10654	2020
KY-819	KY493011_01	Rename			Goose Creek 0.0 to 2.2	Mouth to Headwaters	River/Stream	493011	2.20 MILES	2010 5	Big Sandy River	Floyd	0.00	2.20	37.50687	-82.81284	37.48326	-82.80417	2020
KY-817	KY493008_01	Rename			Goose Creek 0.0 to 4.5	Mouth to UT	River/Stream	493008	4.50 MILES	2000 5	Mississippi River	Graves	0.00	4.50	36.88118	-88.78048	36.83468	-88.75468	2020
KY-2235	KY512349_01	Rename			Goose Creek 0.0 to 8.3	Mouth to Beech Creek	River/Stream	512349	8.30 MILES	2016 5	Kentucky River	Clay	0.00	8.30	37.26982	-83.64347	37.21289	-83.70411	2020
KY-818	KY493010_01	Rename			Goose Creek 0.0 to 8.5	Mouth to Little Goose Creek	River/Stream	493010	8.50 MILES	2002 2	Green River	Casey, Russell	0.00	8.50	37.20330	-85.01084	37.11575	-84.99617	2020
KY-822	KY493014_01	Rename			Goose Creek 0.05 to 3.3	Ohio River Backwaters to I-71	River/Stream	493014	3.25 MILES	2020 5	Ohio River	Jefferson	0.05	3.30	38.31632	-85.64961	38.30046	-85.61935	2020
KY-821	KY493013_02	Rename			Goose Creek 1.9 to 4.25	Ballard Branch to Headwaters	River/Stream	493013	2.35 MILES	2000 5	Kentucky River	Shelby	1.90	4.25	38.14666	-85.03216	38.11688	-85.04396	2020
KY-2236	KY512349_02	Rename			Goose Creek 18.9 to 19.9	Manchester Water Works Intake to 0.4 Miles Below Little Goose Creek	River/Stream	512349	1.00 MILES	2016 2	Kentucky River	Clay	18.90	19.90	37.16833	-83.75056	37.16197	-83.76390	2020
KY-823	KY493014_02	Rename			Goose Creek 3.3 to 12.85	I-71 to Headwaters	River/Stream	493014	9.55 MILES	2020 5	Ohio River	Jefferson	3.30	12.85	38.30046	-85.61935	38.27937	-85.52079	2020
KY-2716					Goose Creek 8.3 to 9.1	Beech Creek to Laurel Creek	River/Stream	512349	0.80 MILES	2020 3	Kentucky River	Clay	8.30	9.10	37.21289	-83.70411	37.21607	-83.71750	2020
KY-2237	KY512350_01	Rename			Goose Pond Ditch 0.0 to 9.55	Wardens Slough to UT	River/Stream	512350	9.55 MILES	2004 5	Ohio River	Union	0.00	9.55	37.62274	-88.13138	37.71142	-88.03835	2020
KY-2238	KY512350-9.55_01	Rename			Goose Pond Ditch UT 0.0 to 1.65	Goose Pond Ditch to headwaters	River/Stream	512350	1.65 MILES	2004 5	Ohio River	Union	0.00	1.65	37.71142	-88.03835	37.72732	-88.01982	2020
KY-2667	KY90000793_00	Rename			Gorin Mill Spring	Entire Springshed of Goren Mill Spring	Spring	90000793	96272 ACRES	2020 3	Green River	Hart, Barren, Metcalfe			37.25834	-85.91335	37.01307	-85.71064	2020
KY-824	KY493047_01	Rename			Gosling Branch 0.0 to 1.35	Mouth to Headwaters	River/Stream	493047	1.35 MILES	2016 5	Big Sandy River	Floyd	0.00	1.35	37.50120	-82.81500	37.49023	-82.79628	2020
KY-2660	KY90000051_00	Rename			Graham Spring	Entire springshed of Graham Spring	Spring	90000051	78082 ACRES	2020 3	Green River	Warren, Edmonson, Barren			37.02116	-86.39266	37.01117	-86.04327	2020
KY-2946					Grane Creek UT 0.75 to 1.1	Henderson Water Utility South to Headwaters	River/Stream	493104	0.35 MILES	2020 3	Green River	Henderson	0.75	1.10	37.64891	-87.51124	37.65363	-87.51309	2020
KY-2239	KY512369_01	Rename			Grannys Branch 0.0 to 2.65	Mouth to Headwaters	River/Stream	512369	2.65 MILES	2000 2	Kentucky River	Clay	0.00	2.65	37.16346	-83.57468	37.19489	-83.56161	2020
KY-2240	KY512371_01	Rename			Grapevine Creek 0.0 to 1.05	Mouth to Coombs Branch	River/Stream	512371	1.05 MILES	2000 5	Kentucky River	Perry	0.00	1.05	37.35585	-83.34587	37.35290	-83.34706	2020
KY-56	KY2743531_00	Rename			Grapevine Lake	Entire Reservoir	Lake/Reservoir	2743531	39 ACRES	2020 2	Green River	Hopkins			37.30600	-87.47663	37.30180	-87.48071	2020
KY-2242	KY512376_01	Rename			Grassy Branch 0.0 to 0.55	Mouth to point of discharge	River/Stream	512376	0.55 MILES	2012 3	Upper Cumberland River	Jackson	0.00	0.55	37.35414	-83.92782	37.34677	-83.92517	2020
KY-2241	KY512375_01	Rename			Grassy Branch 0.0 to 2.15	Mouth to Headwaters	River/Stream	512375	2.15 MILES	2016 5	Kentucky River	Clay	0.00	2.15	37.31801	-83.76589	37.34524	-83.77431	2020
KY-826	KY493152_01	Rename			Grassy Creek 0.0 to 1.35	Mouth to North Fork Grassy Creek	River/Stream	493152	1.35 MILES	2000 2	Licking River	Pendleton	0.00	1.35	38.80631	-84.41848	38.79300	-84.42967	2020
KY-825	KY493149_01	Rename			Grassy Creek 2.3 to 4.6	Forested Riparian Zone to just below Forested Riparian Zone	River/Stream	493149	2.30 MILES	2004 5	Green River	Ohio	2.30	4.60	37.46907	-87.04421	37.45301	-87.02062	2020
KY-2243	KY512382_01	Rename			Grassy Creek 4.7 to 10.3	Lower Long Branch to Caskey Fork and Oldfield Creek	River/Stream	512382	5.60 MILES	2006 5	Licking River	Morgan	4.70	10.30	37.90298	-83.35242	37.85766	-83.37018	2020
KY-2244	KY512386_01	Rename			Grassy Fork 0.0 to 4.3	Mouth to Old Trace Creek	River/Stream	512386	4.30 MILES	2012 4C	Ohio River	Lewis	0.00	4.30	38.43678	-83.26675	38.38789	-83.26251	2020
KY-827	KY493166_01	Rename			Grassy Lick Creek 0.0 to 6.5	Mouth to Aaron's Run	River/Stream	493166	6.50 MILES	2020 5	Licking River	Montgomery	0.00	6.50	38.15864	-83.97477	38.12761	-84.00235	2020
KY-828	KY493170_01	Rename			Grassy Run 0.0 to 6.45	Mouth to UT of Grassy Run	River/Stream	493170	6.45 MILES	2000 2	Kentucky River	Grant	0.00	6.45	38.59969	-84.68456	38.58166	-84.61473	2020
KY-829	KY493176_01	Rename			Gravel Creek 0.6 to 3.1	Mud Run to Headwaters	River/Stream	493176	2.50 MILES	2006 2	Salt River	Bullitt	0.60	3.10	38.00609	-85.75188	38.03600	-85.75896	2020
KY-830	KY493224_00	Rename			Grayson Lake	Dam to Lake Boundaries	Lake/Reservoir	493224	1217 ACRES	2020 5	Little Sandy River	Elliott, Carter			38.25253	-82.98578	38.11798	-83.10711	2020
KY-2245	KY512420_01	Rename			Greasy Creek 0.0 to 10.2	Confluence of Middle Fork of Kentucky River to Bledsoe Coal Discharge (slurry pond)	River/Stream	512420	10.20 MILES	2000 2	Kentucky River	Leslie	0.00	10.20	37.07658	-83.39234	36.99999	-83.34017	2020
KY-832	KY493234_01	Rename			Greasy Creek 0.0 to 11.25	Mouth to Sill Branch	River/Stream	493234	11.25 MILES	2000 4A	Upper Cumberland River	Bell	0.00	11.25	36.79178	-83.75948	36.69623	-83.86010	2020
KY-831	KY493231_01	Rename			Greasy Creek 0.0 to 4.85	Mouth to Middle Fork and Right Fork	River/Stream	493231	4.85 MILES	2010 5	Big Sandy River	Johnson	0.00	4.85	37.84646	-82.73636	37.82514	-82.69124	2020
KY-2246	KY512420_02	Rename			Greasy Creek 10.2 to 12.05	Britton Branch and Revelation Discharge/Slurry Pond to Laurel Fork	River/Stream	512420	1.85 MILES	2016 5	Kentucky River	Leslie	10.20	12.05	36.99999	-83.34017	36.98329	-83.33031	2020
KY-2247	KY512420_03	Rename			Greasy Creek 12.05 to 22.6	Laurel Fork to Big Laurel Creek	River/Stream	512420	10.55 MILES	2000 2	Kentucky River	Leslie, Harlan	12.05	22.60	36.98329	-83.33031	36.97893	-83.21907	2020
KY-833	KY493242_01	Rename			Greasy Ditch 0.0 to 2.6	Mouth to Headwaters	River/Stream	493242	2.60 MILES	2014 4A	Salt River	Jefferson	0.00	2.60	38.15154	-85.71824	38.17704	-85.68557	2020
KY-834	KY493258_01	Rename			Green Branch 0.0 to 1.6	Mouth to Headwaters	River/Stream	493258	1.60 MILES	2004 2	Little Sandy River	Elliott	0.00	1.60	38.08074	-83.00196	38.09874	-83.01767	2020
KY-835	KY493267_01	Rename			Green Creek 0.0 to 8.15	Mouth to below Pond	River/Stream	493267	8.15 MILES	2020 5	Licking River	Bourbon	0.00	8.15	38.13979	-84.18031	38.11703	-84.23081	2020
KY-836	KY493267_02	Rename			Green Creek 8.45 to 13.25	Above Pond to UT	River/Stream	493267	4.80 MILES	2020 5	Licking River	Bourbon	8.45	13.25	38.11492	-84.23538	38.08415	-84.29482	2020
KY-837	KY493284_01	Rename			Green River 0.0 to 27.9	Ohio River Backwaters to Panther Creek	River/Stream	493284	27.90 MILES	2008 2	Green River	Daviess, Henderson	0.00	27.90	37.90488	-87.50026	37.74026	-87.32968	2020
KY-2704					Green River 105.45 to 107.45	0.5 River Miles Upstream of Davenport Landing to 0.75 River Miles Downstream of Lock & Dam #3	River/Stream	493284	2.00 MILES	2020 3	Green River	Muhlenberg, Ohio	105.45	107.45	37.23620	-86.91085	37.22238	-86.90769	2020
KY-3070		Split	KY-841	KY493284_05	Green River 108.2 to 130.4	Mud River to Perdue Farms Intake	River/Stream	493284	22.20 MILES	2020 2	Green River	Ohio, Butler	108.20	130.40	37.21228	-86.89903	37.33464	-86.79619	2020
KY-3071		Split	KY-841	KY493284_05	Green River 130.4 to 131.5	Perdue Farms Intake to 1 Mile Upstream of Ohio County Water Plant	River/Stream	493284	1.10 MILES	2020 2	Green River	Ohio, Butler	130.40	131.50	37.33464	-86.79619	37.32729	-86.77877	2020
KY-3072		Split	KY-841	KY493284_05	Green River 131.5 to 137.4	One Mile Upstream of Ohio County Water Plant to 0.9 River Miles Upstream of I-65	River/Stream	493284	5.90 MILES	2020 2	Green River	Ohio, Butler	131.50	137.40	37.32729	-86.77877	37.27954	-86.73226	2020
KY-3073		Split	KY-841	KY493284_05	Green River 137.4 to 139.4	0.9 River Miles Upstream of I-65 to 2.0 River Miles Downstream of US-231	River/Stream	493284	2.00 MILES	2020 2	Green River	Butler	137.40	139.40	37.27954	-86.73226	37.25580	-86.71360	2020
KY-3074		Split	KY-841	KY493284_05	Green River 139.4 to 142.3	2.0 River Miles Downstream of US-231 to Butler County Water System	River/Stream	493284	2.90 MILES	2020 2	Green River	Butler	139.40	142.30	37.25580	-86.71360	37.23833	-86.67528	2020
KY-3075		Split	KY-841	KY493284_05	Green River 142.3 to 144.3	Butler County Water System to 1 Mile Upstream of Morgantown Utilities Commission	River/Stream	493284	2.00 MILES	2020 2	Green River	Butler	142.30	144.30	37.23833	-86.67528	37.22645	-86.66204	2020
KY-3076		Split	KY-841	KY493284_05	Green River 144.3 to 148.2	1 Mile Upstream of Morgantown Utilities Commission to 1 River Mile Downstream of Lock and Dam #4	River/Stream	493284	3.90 MILES	2020 2	Green River	Butler	144.30	148.20	37.22645	-86.66204	37.19532	-86.63151	2020
KY-3077		Split	KY-841	KY493284_05	Green River 148.2 to 149.6	1 River Mile Downstream of Lock and Dam #4 to Barren River	River/Stream	493284	1.40 MILES	2020 2	Green River	Butler	148.20	149.60	37.19532	-86.63151	37.18112	-86.62376	2020
KY-2760		Split	KY-842	KY493284_06	Green River 149.6 to 168.5	Barren River to Lock and Dam #5	River/Stream	493284	18.90 MILES	2020 2	Green River	Butler, Warren	149.60	168.50	37.18112	-86.62376	37.16870	-86.40334	2020
KY-2953		Split	KY-2736		Green River 168.5 to 181.3	Lock and Dam #5 to Edmonson County Water District	River/Stream	493284	12.80 MILES	2020 2	Green River	Edmonson	168.50	181.30	37.16870	-86.40332	37.20278	-86.25944	2020
KY-2955		Split	KY-2736		Green River 181.8 to 183.15	Edmonson County Water District to Western Mammoth Cave National Park Boundary	River/Stream	493284	1.35 MILES	2020 2	Green River	Edmonson	181.80	183.15	37.20267	-86.25917	37.21698	-86.26334	2020
KY-2749					Green River 183.15 to 208.55	Western Mammoth Cave National Park Boundary to Eastern Mammoth Cave National Park Boundary	River/Stream	493284	25.40 MILES	2020 3	Green River	Edmonson, Hart	183.15	208.55	37.21698	-86.26334	37.25007	-86.02770	2020
KY-2959		Split	KY-844	KY493284_08	Green River 208.55 to 238.5	Eastern Mammoth Cave National Park Boundary to Green River Valley Water	River/Stream	493284	29.95 MILES	2020 5	Green River	Hart	208.55	238.50	37.25007	-86.02770	37.31722	-85.76750	2020
KY-2961		Split	KY-844	KY493284_08	Green River 238.5 to 239.65	Green River Valley Water to Knox Creek (just over a mile upstream from water withdrawal)	River/Stream	493284	1.15 MILES	2020 5	Green River	Hart	238.50	239.65	37.31722	-85.76750	37.31504	-85.75573	2020
KY-2960		Split	KY-844	KY493284_08	Green River 239.65 to 248.25	Knox Creek to Lynn Camp Creek	River/Stream	493284	8.60 MILES	2020 5	Green River	Hart	239.65	248.25	37.31504	-85.75573	37.31973	-85.71529	2020
KY-845	KY493284_09	Rename			Green River 248.25 to 252.2	Lynn Camp Creek to Little Barren River	River/Stream	493284	3.95 MILES	2004 2	Green River	Hart, Green	248.25	252.20	37.31973	-85.71529	37.27821	-85.67881	2020
KY-846	KY493284_10	Rename			Green River 252.2 to 267.8	Little Barren River to Big Pitman Creek	River/Stream	493284	15.60 MILES	2014 2	Green River	Green	252.20	267.80	37.27820	-85.67881	37.28645	-85.58101	2020
KY-847	KY493284_11	Rename			Green River 267.8 to 274.1	Big Pitman Creek to Little Russell Creek	River/Stream	493284	6.30 MILES	2008 2	Green River	Green	267.80	274.10	37.28645	-85.58101	37.23796	-85.56979	2020
KY-3078		Split	KY-838	KY493284_02	Green River 27.9 to 46.85	Panther Creek to Webster County Water District	River/Stream	493284	18.95 MILES	2020 2	Green River	Daviess, Henderson, McLean, Webster	27.90	46.85	37.74026	-87.32968	37.59147	-87.43526	2020
KY-2962		Split	KY-848	KY493284_12	Green River 274.1 to 281.15	Little Russell Creek to Clover Lick Creek (approx. 0.15 river miles downstream Greensburg Municipal Water intake)	River/Stream	493284	7.05 MILES	2020 1	Green River	Green	274.10	281.15	37.23796	-85.56979	37.25453	-85.50341	2020

KY-3260		Split	KY-849	KY493284_13	Green River 281.15 to 282.3	Clover Lick Creek (approx. 0.15 river miles downstream of Greensburg Municipal Water intake) to 1 mile upstream of Greensburg Municipal Water intake	River/Stream	493284	1.15 MILES	2020	4A	Green River	Green	281.15	282.30	37.25453	-85.50341	37.24629	-85.48712	2020
KY-3261		Split	KY-849	KY493284_13	Green River 282.3 to 306.95	1 mile upstream Greensburg Municipal Water intake to Green River Lake Dam	River/Stream	493284	24.65 MILES	2020	4A	Green River	Taylor, Green	282.30	306.95	37.24629	-85.48712	37.24664	-85.33994	2020
KY-850	KY493284_14	Rename			Green River 327.3 to 342.9	Green River Lake backwaters to South Fork Green River	River/Stream	493284	15.60 MILES	2020	5	Green River	Adair, Casey	327.30	342.90	37.18839	-85.19373	37.21701	-84.98491	2020
KY-851	KY493284_15	Rename			Green River 356.95 to 364.65	Liberty City Limits to Knoblick Creek	River/Stream	493284	7.70 MILES	2002	2	Green River	Casey	356.95	364.65	37.31874	-84.92483	37.35394	-84.82761	2020
KY-852	KY493284_16	Rename			Green River 372.95 to 382.15	South Fork of Green River to Headwaters	River/Stream	493284	9.20 MILES	2008	2	Green River	Lincoln	372.95	382.15	37.41192	-84.75270	37.44549	-84.63688	2020
KY-3079		Split	KY-838	KY493284_02	Green River 46.85 to 47.85	Webster County Water District to 1 Mile Upstream	River/Stream	493284	1.00 MILES	2020	2	Green River	McLean, Webster	46.85	47.85	37.59147	-87.43526	37.59125	-87.41715	2020
KY-3080		Split	KY-838	KY493284_02	Green River 47.85 to 53.4	1 Mile Upstream of Webster County Water to Madisonville Municipal Water Works	River/Stream	493284	5.55 MILES	2020	2	Green River	McLean, Hopkins, Webster	47.85	53.40	37.59125	-87.41715	37.53747	-87.36469	2020
KY-3081		Split	KY-838	KY493284_02	Green River 53.4 to 54.55	Madisonville Municipal Water Works to Pond River	River/Stream	493284	1.15 MILES	2020	2	Green River	McLean, Hopkins	53.40	54.55	37.53747	-87.36469	37.52791	-87.35453	2020
KY-839	KY493284_03	Rename			Green River 63.7 to 64.7	Near Point of Withdrawal to 1 Mile Default	River/Stream	493284	1.00 MILES	2014	2	Green River	McLean	63.70	64.70	37.53519	-87.25822	37.52694	-87.24411	2020
KY-2970		Split	KY-840	KY493284_04	Green River 71.0 to 85.1	Rough River to Central City Municipal Water & Sewer	River/Stream	493284	14.10 MILES	2020	5	Green River	Muhlenberg, McLean, Ohio	71.00	85.10	37.48489	-87.13666	37.32445	-87.11516	2020
KY-2972		Split	KY-840	KY493284_04	Green River 85.1 to 86.1	Central City Municipal Water & Sewer to 1 Mile Upstream	River/Stream	493284	1.00 MILES	2020	1	Green River	Muhlenberg, Ohio	85.10	86.10	37.32445	-87.11516	37.33098	-87.10047	2020
KY-2971		Split	KY-840	KY493284_04	Green River 86.1 to 93.3	1 Mile Upstream of Central City Municipal Water & Sewer to Lewis Creek	River/Stream	493284	7.20 MILES	2020	1	Green River	Muhlenberg, Ohio	86.10	93.30	37.33098	-87.10047	37.34586	-87.01198	2020
KY-855	KY493295_00	Rename			Green River Lake	Entire Reservoir	Lake/Reservoir	493295	8442 ACRES	2006	5	Green River	Taylor, Adair			37.24664	-85.33993	37.18846	-85.19373	2020
KY-854	KY493284-365.0_01	Rename			Green River UT 0.0 to 1.05	Mouth to Headwaters	River/Stream	493284	1.05 MILES	2008	3	Green River	Casey	0.00	1.05	37.35403	-84.84765	37.34860	-84.83446	2020
KY-853	KY493284-334.8_01	Rename			Green River UT 0.0 to 3.2	Mouth to Headwaters	River/Stream	493284	3.20 MILES	2008	2	Green River	Adair	0.00	3.20	37.19160	-85.12732	37.15954	-85.11342	2020
KY-2907					Green River UT 0.25 to 0.7	Century Aluminum to Headwaters	River/Stream	493284	0.45 MILES	2020	3	Green River	Henderson	0.25	0.70	37.65709	-87.48955	37.66013	-87.49592	2020
KY-856	KY493306_00	Rename			Greenbo Lake	Dam to Lake Boundaries	Lake/Reservoir	493306	183 ACRES	2016	2	Little Sandy River	Greenup			38.49153	-82.86667	38.48406	-82.88794	2020
KY-3325		Split	KY-857	KY493317_01	Greenbrier Creek 0.0 to 0.95	Mouth to Greenbrier Creek Reservoir	River/Stream	493317	0.95 MILES	2016	5	Licking River	Montgomery	0.00	0.95	38.02082	-83.83128	38.02091	-83.84690	2020
KY-3326		Split	KY-857	KY493317_01	Greenbrier Creek 3.45 to 5.5	Greenbrier Creek Reservoir to Headwaters	River/Stream	493317	2.05 MILES	2016	5	Licking River	Montgomery	3.45	5.50	38.00710	-83.88160	38.00581	-83.91324	2020
KY-860	KY493318_00	Rename			Greenbrier Creek Reservoir (aka Greenbrier Lake)	Entire Reservoir	Lake/Reservoir	493318	175 ACRES	2020	5	Licking River	Montgomery			38.02090	-83.84693	38.00446	-83.87924	2020
KY-858	KY493317-2.7_01	Rename			Greenbrier Creek UT 0.0 to 1.35	Reservoir Backwaters to Headwaters	River/Stream	493317	1.35 MILES	2016	4A	Licking River	Montgomery	0.00	1.35	38.01511	-83.88035	38.02361	-83.90063	2020
KY-859	KY493317-3.2_01	Rename			Greenbrier Creek UT 0.0 to 3.25	Mouth to Headwaters	River/Stream	493317	3.25 MILES	2016	4A	Licking River	Montgomery	0.00	3.25	38.01014	-83.87878	38.01001	-83.93249	2020
KY-113	KY485685_01	Rename			Griers Creek 0.0 to 3.5	Mouth to UT	River/Stream	485685	3.50 MILES	2020	2	Kentucky River	Woodford	0.00	3.50	38.02278	-84.82978	38.01901	-84.78975	2020
KY-861	KY493382_01	Rename			Griffin Creek 0.0 to 2.65	Mouth to Left Fork Griffin Creek / Burgess Fork	River/Stream	493382	2.65 MILES	2004	2	Big Sandy River	Lawrence	0.00	2.65	38.02132	-82.62488	38.01271	-82.59471	2020
KY-863	KY493402_01	Rename			Grindstone Creek 0.1 to 2.0	Kentucky River backwaters to pond near headwaters	River/Stream	493402	1.90 MILES	2020	2	Kentucky River	Franklin	0.10	2.00	38.27066	-84.87948	38.25169	-84.86151	2020
KY-862	KY493401_01	Rename			Grindstone Creek 0.25 to 2.6	Lake Backwaters to Headwaters	River/Stream	493401	2.35 MILES	2006	2	Tennessee River	Calloway	0.25	2.60	36.58230	-88.11886	36.56011	-88.09428	2020
KY-864	KY493438_01	Rename			Grovers Creek 0.7 to 3.4	Kincaid Lake backwaters to UT	River/Stream	493438	2.70 MILES	2020	2	Licking River	Bracken, Pendleton	0.70	3.40	38.70432	-84.24875	38.70795	-84.21217	2020
KY-865	KY493444_01	Rename			Groves Creek 0.0 to 6.5	Mouth to UT	River/Stream	493444	6.50 MILES	2004	5	Green River	Webster	0.00	6.50	37.62729	-87.49956	37.63355	-87.56652	2020
KY-866	KY493458_01	Rename			Guess Creek 0.0 to 2.6	Mouth to Dry Branch	River/Stream	493458	2.60 MILES	2002	5	Tennessee River	Livingston	0.00	2.60	37.06588	-88.36079	37.08222	-88.35360	2020
KY-867	KY493462_01	Rename			Guier Branch 0.0 to 2.9	Mouth to Headwaters	River/Stream	493462	2.90 MILES	2012	2	Tennessee River	Graves, Calloway	0.00	2.90	36.70510	-88.46211	36.70660	-88.50954	2020
KY-868	KY493463_01	Rename			Guist Creek 0.0 to 15.7	Brashers Creek to Jeptha Creek	River/Stream	493463	15.70 MILES	2002	2	Salt River	Spencer, Shelby	0.00	15.70	38.09920	-85.28615	38.13244	-85.19651	2020
KY-869	KY493463_02	Rename			Guist Creek 15.7 to 28.0	Jeptha Creek Confluence to Guist Creek Reservoir Dam	River/Stream	493463	12.30 MILES	2012	5	Salt River	Shelby	15.70	28.00	38.13244	-85.19651	38.20840	-85.15855	2020
KY-871	KY493464_00	Rename			Guist Creek Lake	Entire Reservoir	Lake/Reservoir	493464	341 ACRES	2020	5	Salt River	Shelby			38.20840	-85.15855	38.23760	-85.11592	2020
KY-870	KY493463-33.0-1.4_01	Rename			Guist Creek UT of UT 0.0 to 2.4	UT to Headwaters	River/Stream	493463	2.40 MILES	2006	5	Salt River	Shelby	0.00	2.40	38.24686	-85.10725	38.27547	-85.10259	2020
KY-872	KY493502_01	Rename			Gunpowder Creek 0.0 to 15.35	Ohio River backwaters to South Fork Gunpowder Creek	River/Stream	493502	15.35 MILES	2020	5	Ohio River	Boone	0.00	15.35	38.89793	-84.80213	38.99060	-84.70719	2020
KY-873	KY493502_02	Rename			Gunpowder Creek 15.35 to 17.05	South Fork Gunpowder Creek to UT	River/Stream	493502	1.70 MILES	2000	5	Ohio River	Boone	15.35	17.05	38.99061	-84.70719	39.00555	-84.69204	2020
KY-874	KY493502_03	Rename			Gunpowder Creek 19.35 to 21.95	Airport to Headwaters	River/Stream	493502	2.60 MILES	2002	5	Ohio River	Boone	19.35	21.95	39.03235	-84.67413	39.05686	-84.69718	2020
KY-875	KY493502-17.05_01	Rename			Gunpowder Creek UT 0.0 to 4.0	Mouth to Headwaters	River/Stream	493502	4.00 MILES	2016	5	Ohio River	Boone	0.00	4.00	39.00555	-84.69204	39.00314	-84.63427	2020
KY-2248	KY512505_01	Rename			Hale Fork 0.0 to 2.8	Mouth to Headwaters	River/Stream	512505	2.80 MILES	2002	2	Upper Cumberland River	Knox	0.00	2.80	36.89875	-83.74720	36.92720	-83.77704	2020
KY-876	KY493570_01	Rename			Hall Branch 0.7 to 1.05	Landuse Change to Dam	River/Stream	493570	0.35 MILES	2004	2	Kentucky River	Scott	0.70	1.05	38.39775	-84.52133	38.40123	-84.51630	2020
KY-877	KY493584_01	Rename			Hall Fork 0.0 to 2.1	Mouth to Headwaters	River/Stream	493584	2.10 MILES	2010	5	Big Sandy River	Floyd	0.00	2.10	37.44933	-82.72649	37.45160	-82.69136	2020
KY-878	KY493602_01	Rename			Halls Creek 4.8 to 9.65	Wolf Creek to Headwaters	River/Stream	493602	4.85 MILES	2008	5	Green River	Ohio	4.80	9.65	37.51435	-86.79090	37.47328	-86.73372	2020
KY-879	KY493640_01	Rename			Hammond Creek 0.0 to 5.6	Mouth to Lawrenceburg STP	River/Stream	493640	5.60 MILES	2020	5	Salt River	Anderson	0.00	5.60	38.00723	-84.98148	38.04424	-84.92220	2020
KY-880	KY493640-5.2_01	Rename			Hammond Creek UT 2.8 to 4.7	UT to Headwaters	River/Stream	493640	1.90 MILES	2004	5	Salt River	Anderson	2.80	4.70	38.06962	-84.90221	38.08304	-84.87474	2020
KY-2249	KY512542_01	Rename			Hammons Fork 0.0 to 4.8	Mouth to Jones Fork	River/Stream	512542	4.80 MILES	2006	2	Kentucky River	Knox	0.00	4.80	36.98541	-83.82722	36.99815	-83.76459	2020
KY-3292					Hancock Creek 0.0 to 4.2	Mouth to UT below railroad track	River/Stream	493672	4.20 MILES	2020	5	Licking River	Clark	0.00	4.20	38.04858	-84.19217	38.03329	-84.23479	2020
KY-881	KY493672_01	Rename			Hancock Creek 4.2 to 7.6	Upstream of UT to Headwaters	River/Stream	493672	3.40 MILES	2020	5	Licking River	Clark	4.20	7.60	38.03328	-84.23480	38.00819	-84.27226	2020
KY-882	KY493672-4.2_01	Rename			Hancock Creek UT 0.0 to 3.72	Mouth to Headwaters	River/Stream	493672	3.72 MILES	2020	5	Licking River	Clark	0.00	3.72	38.03328	-84.23480	37.99848	-84.26473	2020
KY-3293					Hancock Creek UT of UT 0.0 to 1.15	Mouth to headwaters	River/Stream	493672	1.15 MILES	2020	5	Licking River	Clark	0.00	1.15	38.03324	-84.25961	38.03318	-84.27927	2020
KY-47	KY2566651_01	Rename			Hanging Fork 0.0 to 1.25	Mouth to Headwaters	River/Stream	2566651	1.25 MILES	2016	4A	Kentucky River	Lincoln	0.00	1.25	37.49021	-84.73979	37.49179	-84.71902	2020
KY-883	KY493684_01	Rename			Hanging Fork Creek 0.0 to 15.9	Mouth to Knoblick Creek	River/Stream	493684	15.90 MILES	2008	4A	Kentucky River	Boyle, Lincoln	0.00	15.90	37.63448	-84.65820	37.55492	-84.71996	2020
KY-884	KY493684_02	Rename			Hanging Fork Creek 15.9 to 24.25	Knoblick Creek to McKinney Branch	River/Stream	493684	8.35 MILES	2008	4A	Kentucky River	Lincoln	15.90	24.25	37.55492	-84.71996	37.48178	-84.77041	2020
KY-885	KY493684_03	Rename			Hanging Fork Creek 24.25 to 27.7	McKinney Branch to Baughman Creek	River/Stream	493684	3.45 MILES	2008	4A	Kentucky River	Lincoln	24.25	27.70	37.48138	-84.76860	37.47093	-84.82075	2020
KY-886	KY493684_04	Rename			Hanging Fork Creek 27.7 to 32.2	Baughman Creek to Headwaters	River/Stream	493684	4.50 MILES	2008	4A	Kentucky River	Lincoln, Casey	27.70	32.20	37.47093	-84.82075	37.49859	-84.88184	2020
KY-892	KY493684-26.05_01	Rename			Hanging Fork Creek UT 0.0 to 1.3	Mouth to Headwaters	River/Stream	493684	1.30 MILES	2016	4A	Kentucky River	Lincoln	0.00	1.30	37.47221	-84.79610	37.45533	-84.80363	2020
KY-889	KY493684-24.55_01	Rename			Hanging Fork Creek UT 0.0 to 1.7	Mouth to Headwaters	River/Stream	493684	1.70 MILES	2016	4A	Kentucky River	Lincoln	0.00	1.70	37.48254	-84.77394	37.49494	-84.79939	2020
KY-893	KY493684-29.1_01	Rename			Hanging Fork Creek UT 0.0 to 1.8	Mouth to Headwaters	River/Stream	493684	1.80 MILES	2016	4A	Kentucky River	Lincoln, Casey	0.00	1.80	37.47299	-84.84339	37.47562	-84.86724	2020
KY-894	KY493684-30.6_01	Rename			Hanging Fork Creek UT 0.0 to 1.8	Mouth to Headwaters	River/Stream	493684	1.80 MILES	2016	4A	Kentucky River	Casey	0.00	1.80	37.48514	-84.86168	37.47696	-84.88824	2020
KY-887	KY493684-19.7_01	Rename			Hanging Fork Creek UT 0.0 to 1.85	Mouth to Headwaters	River/Stream	493684	1.85 MILES	2016	4A	Kentucky River	Lincoln	0.00	1.85	37.52372	-84.74131	37.51801	-84.76986	2020
KY-888	KY493684-24.1_01	Rename			Hanging Fork Creek UT 0.0 to 2.0	Mouth to Headwaters	River/Stream	493684	2.00 MILES	2016	4A	Kentucky River	Lincoln	0.00	2.00	37.48135	-84.76860	37.49731	-84.79393	2020
KY-890	KY493684-25.25_01	Rename			Hanging Fork Creek UT 0.0 to 2.4	Mouth to Headwaters	River/Stream	493684	2.40 MILES	2016	4A	Kentucky River	Lincoln	0.00	2.40	37.47826	-84.78490	37.49903	-84.81577	2020
KY-891	KY493684-25.25-1.6_01	Rename			Hanging Fork Creek UT of UT 0.0 to 0.50	Mouth to Headwaters	River/Stream	493684	0.50 MILES	2016	4A	Kentucky River	Lincoln	0.00	0.50	37.49209	-84.80682	37.49881	-84.80755	2020
KY-895	KY493728_01	Rename			Hardins Creek 0.0 to 11.4	Mouth to WWTP	River/Stream	493728	11.40 MILES	2012	5	Salt River	Breckinridge	0.00	11.40	37.86766	-86.44070	37.79123	-86.46541	2020
KY-896	KY493729_01	Rename			Hardins Creek 0.0 to 7.2	Mouth to Hickory Camp Creek	River/Stream	493729	7.20 MILES	2002	2	Salt River	Marion, Washington	0.00	7.20	37.73058	-85.40135	37.65584	-85.34893	2020
KY-897	KY493729_02	Rename			Hardins Creek 13.3 to 22.95	Cissels Creek to Headwaters	River/Stream	493729	9.65 MILES	2004	5	Salt River	Marion	13.30	22.95	37.60176	-85.33807	37.57391	-85.22522	2020
KY-2250	KY512561_01	Rename			Hardwick Creek 0.0 to 3.3	Mouth to Little Hardwick Creek Confluence	River/Stream	512561	3.30 MILES	2016	4A	Kentucky River	Powell	0.00	3.30	37.83300	-83.92639	37.80637	-83.91057	2020
KY-2707					Hardwick Creek 3.3 to 8.75	Little Hardwick Creek confluence to UT where forested corridor of stream increases	River/Stream	512561	5.45 MILES	2020	4A	Kentucky River	Powell	3.30	8.75	37.80637	-83.91057	37.76934	-83.85117	2020
KY-898	KY493737_01	Rename			Hardy Creek 0.0 to 1.4	Mouth to Dry Fork	River/Stream	493737	1.40 MILES	2000	5	Salt River	Trimble	0.00	1.40	38.60631	-85.26451	38.61178	-85.27889	2020
KY-899	KY493737_02	Rename			Hardy Creek 1.6 to 5.6	Dry Fork to below Farm Ponds	River/Stream	493737	4.00 MILES	2006	5	Ohio River	Trimble	1.60	5.60	38.61280	-85.28160	38.65400	-85.30996	2020
KY-900	KY493757_01	Rename			Harmond Branch 0.0 to 0.9	Mouth to Discharge	River/Stream	493757	0.90 MILES	2010	3	Big Sandy River	Pike	0.00	0.90	37.53021	-82.60166	37.53932	-82.59849	2020

KY-2985		Split	KY-2312	KY513130_04	Kentucky River 66.4 to 70.8	Upstream side of lock and dam 4 to Frankfort Electric & Water Plant Board	River/Stream	513130	4.40	MILES	2020	5	Kentucky River	Franklin	66.40	70.80	38.21166	-84.87259	38.17092	-84.86551	2020
KY-2987		Split	KY-2312	KY513130_04	Kentucky River 70.8 to 71.8	Frankfort Electric & Water Plant Board to 1 Mile Upstream	River/Stream	513130	1.00	MILES	2020	5	Kentucky River	Franklin	70.80	71.80	38.17092	-84.86551	38.16566	-84.85443	2020
KY-2986		Split	KY-2312	KY513130_04	Kentucky River 71.8 to 83.5	1 Mile Upstream of Frankfort Electric & Water Plant Board to Lock and Dam 5	River/Stream	513130	11.70	MILES	2020	5	Kentucky River	Anderson, Woodford, Franklin	71.80	83.50	38.16566	-84.85443	38.05194	-84.83026	2020
KY-2937		Split	KY-2313	KY513130_05	Kentucky River 85.2 to 86.2	Lawrenceburg Municipal Water Works Point of withdrawal to 1 mile upstream	River/Stream	513130	1.00	MILES	2020	2	Kentucky River	Woodford, Anderson	85.20	86.20	38.04118	-84.84771	38.03262	-84.83265	2020
KY-2936		Split	KY-2313	KY513130_05	Kentucky River 86.7 to 87.7	Versailles Municipal Water Works Point of withdrawal to 1 mile upstream of Versailles Intake	River/Stream	513130	1.00	MILES	2016	2	Kentucky River	Woodford, Anderson	86.70	87.70	38.02607	-84.82943	38.01335	-84.83789	2020
KY-2938		Split	KY-2314	KY513130_06	Kentucky River 98.2 to 115.95	Lock and Dam 6 to Wilmore Utilities	River/Stream	513130	17.75	MILES	2020	5	Kentucky River	Jessamine, Woodford, Mercer	98.20	115.95	37.92674	-84.82157	37.85476	-84.66887	2020
KY-2321	KY513130-66.2_01	Rename			Kentucky River UT 0.1 to 1.45	Near Mouth to Land Use Change	River/Stream	513130	1.35	MILES	2006	2	Kentucky River	Franklin	0.10	1.45	38.21910	-84.87777	38.23174	-84.86242	2020
KY-1026	KY495698_01	Rename			Kettle Creek 1.75 to 6.1	KY/TN State Line to Headwaters	River/Stream	495698	4.35	MILES	2008	2	Upper Cumberland River	Monroe, Cumberland	1.75	6.10	36.61526	-85.49117	36.65104	-85.44504	2020
KY-3243					Kettle Island Spring	Entire Springshed	Spring	9000463	1164	ACRES	2020	3	Upper Cumberland River	Bell			36.76834	-83.62556	36.81756	-83.53756	2020
KY-1027	KY495705_01	Rename			Kettlecamp Branch 0.0 to 1.65	Mouth to Headwaters	River/Stream	495705	1.65	MILES	2016	5	Big Sandy River	Pike	0.00	1.65	37.27816	-82.38342	37.29323	-82.40131	2020
KY-1028	KY495709_01	Rename			Key Creek 0.0 to 1.9	Mouth to Headwaters	River/Stream	495709	1.90	MILES	2008	5	Mississippi River	Graves	0.00	1.90	36.78705	-88.63171	36.76563	-88.64473	2020
KY-2322	KY513138_01	Rename			Kilburn Fork 0.0 to 0.9	Mouth to Laurel Fork	River/Stream	513138	0.90	MILES	2016	2	Upper Cumberland River	McCreary	0.00	0.90	36.80492	-84.37957	36.81514	-84.38294	2020
KY-2323	KY513138_02	Rename			Kilburn Fork 0.9 to 6.2	Laurel Fork to UT	River/Stream	513138	5.30	MILES	2008	2	Upper Cumberland River	McCreary	0.90	6.20	36.81514	-84.38742	36.84948	-84.43840	2020
KY-44	KY2564275_00				Kincaid Lake	Entire Reservoir	Lake/Reservoir	2564275	236	ACRES	2020	5	Licking River	Pendleton			38.72431	-84.29113	38.69855	-84.26302	2020
KY-1029	KY495730_01	Rename			Kingdom Come Creek 0.0 to 4.35	Mouth to Headwaters	River/Stream	495730	4.35	MILES	2016	5	Kentucky River	Letcher	0.00	4.35	37.11344	-82.90630	37.07091	-82.86602	2020
KY-1030	KY495754_00	Rename			Kingfisher Lakes - Lower Lake	Lower Lake of Kingfisher Lakes, downstream dam to upstream dam	Lake/Reservoir	495754	21	ACRES	2020	5	Ohio River	Daviess			37.84289	-86.97812	37.84612	-86.97267	2020
KY-2765		Split	KY-2324	KY513155_01	Kinniconick Creek 0.75 to 5.05	Montgomery Creek to McDowell Creek	River/Stream	513155	4.30	MILES	2020	2	Ohio River	Lewis	0.75	5.05	38.60866	-83.16309	38.57479	-83.18862	2020
KY-2764		Split	KY-2324	KY513155_01	Kinniconick Creek 5.05 to 50.95	McDowell Creek to Headwaters	River/Stream	513155	45.90	MILES	2020	2	Ohio River	Lewis	5.05	50.95	38.57479	-83.18862	38.42073	-83.53947	2020
KY-1031	KY495836_01	Rename			Knob Creek 1.4 to 3.1	Land use change to land use change	River/Stream	495836	1.70	MILES	2002	5	Mississippi River	Graves	1.40	3.10	36.52070	-88.67774	36.54115	-88.67588	2020
KY-2325	KY513165_01	Rename			Knob Lick Branch 0.0 to 2.8	Mouth to Headwaters	River/Stream	513165	2.80	MILES	2004	2	Kentucky River	Estill	0.00	2.80	37.65385	-84.11240	37.62329	-84.09703	2020
KY-1032	KY495848_01	Rename			Knoblick Creek 0.0 to 2.1	Mouth to East and West Forks	River/Stream	495848	2.10	MILES	2004	4A	Green River	Daviess	0.00	2.10	37.72541	-87.31055	37.70481	-87.32569	2020
KY-1033	KY495849_01	Rename			Knoblick Creek 0.0 to 4.7	Mouth to Harris Creek	River/Stream	495849	4.70	MILES	2008	4A	Green River	Lincoln	0.00	4.70	37.55492	-84.71996	37.54705	-84.77269	2020
KY-1034	KY495850_01	Rename			Knoblick Creek 0.0 to 9.1	Mouth to Headwaters	River/Stream	495850	9.10	MILES	2004	5	Green River	Webster	0.00	9.10	37.56183	-87.53740	37.58223	-87.65772	2020
KY-1035	KY495849_02	Rename			Knoblick Creek 4.75 to 8.15	Harris Creek to Headwaters	River/Stream	495849	3.40	MILES	2016	4A	Green River	Boyle, Lincoln	4.75	8.15	37.54709	-84.77265	37.58441	-84.78991	2020
KY-1036	KY495859_01	Rename			Knox Creek 0.0 to 7.95	Mouth to State Line	River/Stream	495859	7.95	MILES	2020	5	Big Sandy River	Pike	0.00	7.95	37.53901	-82.05993	37.47100	-82.06294	2020
KY-2326	KY513169_01	Rename			Knox Hill Branch 0.0 to 3.05	Mouth to Headwaters	River/Stream	513169	3.05	MILES	2006	2	Licking River	Bath	0.00	3.05	38.16941	-83.64498	38.15926	-83.69411	2020
KY-1037	KY495895_01	Rename			Lacy Creek 0.0 to 7.25	Mouth to Headwaters	River/Stream	495895	7.25	MILES	2016	5	Kentucky River	Wolfe	0.00	7.25	37.79219	-83.42370	37.71248	-83.39953	2020
KY-166	KY486356_00	Rename			Lake Barkley	Kentucky's portion of; Dam to KY/TN State Line	Lake/Reservoir	486356	39298	ACRES	2020	2	Lower Cumberland River	Trigg, Lyon, Livingston			37.02006	-88.22474	36.66711	-87.90230	2020
KY-233	KY486922_00	Rename			Lake Beshear	Dam to Upper Lake Boundary	Lake/Reservoir	486922	835	ACRES	2020	2	Tradewater River	Caldwell, Christian			37.14853	-87.68211	37.10566	-87.71042	2020
KY-301	KY487570_00	Rename			Lake Blythe	Dam to lake boundaries	Lake/Reservoir	487570	94	ACRES	2020	5	Lower Cumberland River	Christian			36.92316	-87.49556	36.92827	-87.50523	2020
KY-41	KY2555584_00	Rename			Lake Carnico (aka Lake Carnico)	Entire Reservoir	Lake/Reservoir	2555584	116	ACRES	2020	2	Licking River	Nicholas			38.34566	-84.04380	38.35084	-84.02948	2020
KY-584	KY490483_00	Rename			Lake Cumberland	Dam to Lake Boundaries	Lake/Reservoir	490483	41292	ACRES	2020	5	Upper Cumberland River	Pulaski, Russell, Wayne			36.86869	-85.14743	36.96008	-84.35802	2020
KY-48	KY2567392_00	Rename			Lake Elmer Davis	Dam to Lake Boundary	Lake/Reservoir	2567392	121	ACRES	2016	5	Kentucky River	Owen			38.49539	-84.88277	38.50537	-84.85948	2020
KY-2688	KY489521_00	Rename			Lake George	Dam to Upper Lake	Lake/Reservoir	4	50	ACRES	2020	5	Ohio River	Crittenden			37.30228	-88.09037	37.29293	-88.09063	2020
KY-699	KY495230_00	Rename			Lake Jericho	Entire Reservoir	Lake/Reservoir	495230	142	ACRES	2006	5	Ohio River	Henry			38.44600	-85.28112	38.42139	-85.27690	2020
KY-50	KY2568414_00	Rename			Lake Liberty	Dam to Upper lake	Lake/Reservoir	2568414	82	ACRES	2020	2	Green River	Casey			37.32310	-84.89588	37.31119	-84.89028	2020
KY-2368	KY513442_00	Rename			Lake Linville	Dam to Lake Boundaries	Lake/Reservoir	513442	368	ACRES	2020	5	Upper Cumberland River	Rockcastle			37.38308	-84.33526	37.40448	-84.35071	2020
KY-1225	KY497476_00	Rename			Lake Malone	Dam to Upper lake	Lake/Reservoir	497476	770	ACRES	2020	5	Green River	Muhlenberg, Todd, Logan			37.08138	-87.03196	37.02255	-87.07827	2020
KY-1139	KY498624_00	Rename			Lake Morris	Entire Reservoir	Lake/Reservoir	498624	137	ACRES	2020	5	Lower Cumberland River	Christian			36.91996	-87.45599	36.93754	-87.45567	2020
KY-1462	KY500353_00	Rename			Lake Peewee	Dam to Upper lake	Lake/Reservoir	500353	398	ACRES	2020	5	Tradewater River	Hopkins			37.34903	-87.52806	37.33093	-87.53638	2020
KY-1558	KY501636_00	Rename			Lake Reba	Dam to Lake Boundary	Lake/Reservoir	501636	86	ACRES	2020	5	Kentucky River	Madison			37.74115	-84.25133	37.73049	-84.24389	2020
KY-1137	KY498815_00	Rename			Lake Vega	Dam to Reservoir Boundary	Lake/Reservoir	2787915	84	ACRES	2016	2	Kentucky River	Madison			37.69999	-84.21742	37.69992	-84.24127	2020
KY-2691	KYCLN076_00	Rename			Lake Washburn	Dam to Upper lake	Lake/Reservoir	76	23	ACRES	2020	5	Green River	Ohio			37.51868	-86.84835	37.51583	-86.84268	2020
KY-1038	KY495942_01	Rename			Lambs Creek 0.0 to 3.3	Mouth to UT	River/Stream	495942	3.30	MILES	2004	5	Tradewater River	Hopkins	0.00	3.30	37.31290	-87.65101	37.26885	-87.61479	2020
KY-3152					Lane Branch 0.0 to 3.1	Mouth to headwaters	River/Stream	495969	3.10	MILES	2020	5	Licking River	Bath, Montgomery	0.00	3.10	38.14946	-83.94317	38.15832	-83.89675	2020
KY-1039	KY495977_01	Rename			Lanes Run 0.0 to 0.6	Mouth to Georgetown STP #2	River/Stream	495977	0.60	MILES	2020	5	Kentucky River	Scott	0.00	0.60	38.21166	-84.52886	38.21808	-84.52348	2020
KY-3299					Lanes Run 0.6 to 4.6	Georgetown STP #2 to UT near Enterprise Way road crossing	River/Stream	495977	4.00	MILES	2020	5	Kentucky River	Scott	0.60	4.60	38.21808	-84.52348	38.26445	-84.52735	2020
KY-2328	KY513229_01	Rename			Laurel Branch 0.0 to 2.2	Mouth to Headwaters	River/Stream	513229	2.20	MILES	2008	2	Upper Cumberland River	Laurel	0.00	2.20	37.20644	-84.25953	37.21052	-84.22962	2020
KY-2327	KY513220_01	Rename			Laurel Branch 0.0 to 2.35	Mouth to UT with discharge from school	River/Stream	513220	2.35	MILES	2016	2	Upper Cumberland River	Laurel	0.00	2.35	37.09036	-84.16872	37.07112	-84.14729	2020
KY-1040	KY496020_01	Rename			Laurel Branch 1.0 to 2.6	UT to Headwaters	River/Stream	496020	1.60	MILES	2004	2	Little Sandy River	Elliott	1.00	2.60	38.12023	-83.04338	38.13489	-83.02648	2020
KY-2283	KY513242_01	Rename			Laurel Creek 0.0 to 7.75	Mouth to CR-1332 Stegall Cold Spring Road	River/Stream	513242	7.75	MILES	2020	2	Little Sandy River	Elliott	0.00	7.75	38.11795	-83.10715	38.12911	-83.18963	2020
KY-2869		Split	KY-2329	KY513239_01	Laurel Creek 0.85 to 3.2	Wright Branch to Jenneys Branch	River/Stream	513239	2.35	MILES	2020	2	Upper Cumberland River	McCreary	0.85	3.20	36.72777	-84.37856	36.73481	-84.39944	2020
KY-2285	KY513242_03	Rename			Laurel Creek 11.5 to 14.75	Lovelace Fork to Headwaters	River/Stream	513242	3.25	MILES	2016	5	Little Sandy River	Rowan	11.50	14.75	38.13288	-83.23484	38.16673	-83.26686	2020
KY-1041	KY496023_01	Rename			Laurel Creek 2.05 to 6.65	End of Forested Riparian Zone to Headwaters	River/Stream	496023	4.60	MILES	2008	2	Green River	Logan	2.05	6.65	36.93819	-86.89278	36.89121	-86.91869	2020
KY-2870		Split	KY-2329	KY513239_01	Laurel Creek 3.2 to 3.7	Jenneys Branch to Bridge Fork	River/Stream	513239	0.50	MILES	2020	2	Upper Cumberland River	McCreary	3.20	3.70	36.73481	-84.39944	36.72833	-84.40341	2020
KY-2282	KY513241_01	Rename			Laurel Creek 3.2 to 4.7	Gabbard Fork to Morgan Branch	River/Stream	513241	1.50	MILES	2006	5	Kentucky River	Clay	3.20	4.70	37.23159	-83.75881	37.23056	-83.78221	2020
KY-2280	KY513239_02	Rename			Laurel Creek 3.7 to 5.2	Bridge Fork to Ellsha Branch	River/Stream	513239	1.50	MILES	2008	5	Upper Cumberland River	McCreary	3.70	5.20	36.72833	-84.40341	36.71660	-84.40787	2020
KY-2849					Laurel Creek 5.2 to 7.4	Ellsha Branch to UT	River/Stream	513239	2.20	MILES	2020	5	Upper Cumberland River	McCreary	5.20	7.40	36.71660	-84.40787	36.70435	-84.43140	2020
KY-2281	KY513239_03	Rename			Laurel Creek 7.4 to 9.1	UT to Laurel Creek Reservoir Dam	River/Stream	513239	1.70	MILES	2008	3	Upper Cumberland River	McCreary	7.40	9.10	36.70435	-84.43140	36.69300	-84.44329	2020
KY-2881		Split	KY-2284	KY513242_02	Laurel Creek 7.75 to 11.5	CR-1332 Stegall Cold Spring Road to Lovelace Fork	River/Stream	513242	3.75	MILES	2020	2	Little Sandy River	Rowan, Elliott	7.75	11.50	38.12911	-83.18963	38.13288	-83.23484	2020
KY-2051	KY509430_00	Rename			Laurel Creek Reservoir	Dam to Lake Boundaries	Lake/Reservoir	509430	46	ACRES	2020	5	Upper Cumberland River	McCreary			36.69208	-84.44368	36.68493	-84.44629	2020
KY-2330	KY513244_01	Rename			Laurel Fork 0.0 to 1.3	Mouth to Tom Fork	River/Stream	513244	1.30	MILES	2020	2	Upper Cumberland River	McCreary	0.00	1.30	36.81514	-84.38294	36.83104	-84.38579	2020
KY-2331	KY513254_01	Rename			Laurel Fork 0.0 to 4.5	Mouth to Confluence of Meadow Fork and Pig Pen Branch	River/Stream	513254	4.50	MILES	2020	2	Kentucky River	Owsley	0.00	4.50	37.35705	-83.59373	37.32419	-83.56236	2020
KY-2332	KY513257_01	Rename			Laurel Fork 0.0 to 5.0	Mouth to McCammon Branch	River/Stream	513257	5.00	MILES	2010	5	Upper Cumberland River	Jackson	0.00	5.00	37.36741	-84.04836	37.39441	-84.02219	2020
KY-1043	KY496040_02	Rename			Laurel Fork 10.3 to 13.8	Land use change to Pine Creek	River/Stream	496040	3.50	MILES	2000	5	Upper Cumberland River	Whitley	10.30	13.80	36.61273	-83.97477	36.63645	-83.94433	2020
KY-2741					Laurel Fork 13.8 to 15.85	Pine Creek to CR-1232 John Partin Road	River/Stream	496040	2.05	MILES	2020	5	Upper Cumberland River	Bell	13.80	15.85	36.63645	-83.94433	36.64180	-83.92029	2020
KY-1044	KY496040_03	Rename			Laurel Fork 16.9 to 18.9	Land Use Change to Significant Land Use Change	River/Stream	496040	2.00	MILES	2002	2	Upper Cumberland River	Bell	16.90	18.90	36.63923	-83.90892	36.64389	-83.88099	2020
KY-1042	KY496040_01	Rename			Laurel Fork 4.25 to 10.35	KY/TN State Line to land use change just below 2nd Order UT	River/Stream	496040	6.10	MILES	2010	5	Upper Cumberland River	Whitley	4.25	10.35	36.58947	-83.98760	36.61273	-83.97477	2020
KY-2742					Laurel Fork 5.0 to 12.35	McCammon Branch to Headwaters	River/Stream	513257	7.35	MILES	2020	5	Upper Cumberland River	Jackson	5.00	12.35	37.37976	-83.98441	37.34310	-83.89114	2020
KY-2333	KY513259_01	Rename			Laurel Fork 5.8 to 15.95	Grassy Fork to Swim Branch and Clinton Hamilton Branch	River/Stream	513259	10.15	MILES	2006	5	Ohio River	Lewis	5.80	15.95	38.43678	-83.26675	38.33442	-83.34427	2020
KY-2334	KY513263_01	Rename			Laurel River 1.15 to 2.3	Lake Cumberland Backwaters to Dam (Laurel River Reservoir)	River/Stream	513263	1.15	MILES	2006	5	Upper Cumberland River	Whitley, Laurel	1.15	2.30	36.95663	-84.28321	36.96164	-84.27024	2020
KY-2335	KY513263_02	Rename			Laurel River 23.4 to 24.65	Little Laurel River to Dorthae Dam	River/Stream	513263	1.25	MILES	2006	5	Upper Cumberland River	Laurel	23.40	24.65	37.00797	-84.11079	37.00167	-84.10035	2020
[illegible]					Laurel River 24.65 to 25.8	Dorthae Dam to impact of dam / Robinson Creek	River/Stream	513263	1.15	MILES	2020	3	Upper Cumberland River	Laurel	24.65	25.80	37.00167	-84.10035	37.00935	-84.08495	2020
KY-2336	KY513263_03	Rename			Laurel River 25.8 to 33.7	Impact of Dorthae Dam / Robinson Creek to Lick Creek	River/Stream	513263	7.90	MILES	2016	5	Upper Cumberland River	Laurel	25.80	33.70	37.00935	-84.08495	37.05463	-84.02745	2020
KY-2337	KY513263_04	Rename			Laurel River 33.7 to 44.9	Lick Creek to Backwater Creek	River/Stream	513263	11.20	MILES	2012	5	Upper Cumberland River	Laurel	33.70	44.90	37.05463	-84.02745	37.07351	-83.93098	2020
KY-2338	KY513266_00	Rename			Laurel River Lake	Dam to Lake Boundaries	Lake/Reservoir	513266	5963	ACRES	2020	2	Upper Cumberland River	Laurel, Whitley			36.96150	-84.26788	36.97004	-84.12019	2020
KY-1045	KY496078_01	Rename			Lawrence Creek 2.3 to 4.0	Backwaters of Ohio River to UT	River/Stream	496078	1.70	MILES	2006	2	Ohio River	Mason	2.30	4.00	38.68780	-83.81999	38.66856	-83.81010	2020
KY-3205					Lawrence Creek 4.0 to 10.1	UT to Headwaters	River/Stream	496078	6.10	MILES	2020	4C	Ohio River	Mason	4.00	10.10	38.66856	-83.81010	38.61054	-83.79478	2020
KY-2339	KY513272_01	Rename			Lawson Creek 0.0 to 3.1	Mouth to Headwaters	River/Stream	513272	3.10	MILES	2016	4A	Kentucky River	Bell	0.00	3.10	36.93708	-83.53530	36.91380	-83.57191	2020
KY-1046	KY496121_01	Rename			Leatherwood Branch 0.0 to 4.3	Mouth to Buzzard Roost Fork	River/Stream	496121	4.30	MILES	2004	2	Tygarts Creek	Greenup	0.00	4.30	38.48599	-83.02796	38.52054	-83.08358	2020
KY-1047	KY496123_01	Rename			Leatherwood Creek 0.0 to 3.95	Mouth to Headwaters	River/Stream	496123	3.95	MILES	2012	2	Upper Cumberland River	Monroe, Cumberland	0.00	3.95	36.83574	-85.56388	36.80453	-85.61327	2020
KY-1048	KY496124_01	Rename			Leatherwood Creek 0.0 to 4.25	Mouth to Pond	River/Stream	496124	4.25	MILES	1998	2	Kentucky River	Breathitt	0.00	4.25	37.44287	-83.31219	37.39136	-83.29684	2020
KY-2340	KY513284_01	Rename			Leatherwood Creek 0.0 to 8.7	Mouth of Leatherwood Creek to Mouth of Clover Fork	River/Stream	513284	8.70	MILES	2000	2	Kentucky River	Perry	0.00	8.70	37.12150	-83.06848	37.04771	-83.07330	2020
KY-1049	KY496126_01	Rename			Leatherwood Creek 1.65 to 3.2	Reservoir Backwaters to Mile Point 3.2	River/Stream	496126	1.55	MILES	2016	5	Kentucky River	Breathitt	1.65	3.20	37.50328	-83.21995	37.48730	-83.20418	2020
KY-1050	KY496142_01	Rename			LeComptes Run 0.0 to 1.95	Mouth to Locust Fork	River/Stream	496142	1.95	MILES	2020	5	Kentucky River	Scott	0.00	1.95	38.26314	-84.71571	38.27439	-84.69916	2020
KY-3303					Lecomptes Run 1.95 to 6.95	Locust Fork to Headwaters	River/Stream	496142	5.00	MILES	2020	4C	Kentucky River	Scott	1.95	6.95	38.27439	-84.69916	38.33550	-84.69334	2020
KY-1051	KY496144_01	Rename			Ledbetter Creek 1.95 to 4.6	Kentucky Backwaters to Headwaters	River/Stream	496144	2.65	MILES	2002	2	Tennessee River	Calloway	1.95	4.60	36.73856	-88.14533	36.70938	-88.16786	2020
KY-1052	KY496153_01	Rename			Lee Branch 0.0 to 1.0	Mouth to Midway WWTP	River/Stream	496153	1.00	MILES	2010	4A	Kentucky River	Woodford	0.00	1.00	38.17074	-84.68991	38.16102	-84.68634	2020
KY-3313					Lee Branch 1.85 to 3.3	US-62 to UT near loss of riparian zone	River/Stream	496153	1.45	MILES	2020	2	Kentucky River	Woodford	1.85	3.30	38.15212	-84.68335	38.13783	-84.68426	2020
KY-1053	KY496181_01	Rename			Lees Creek 0.0 to 4.3	Mouth to UT	River/Stream	496181	4.30	MILES	2006	5	Licking River	Mason	0.00	4.30	38.56966	-83.84974	38.53254	-83.82975	2020
KY-1054	KY496181-4.3-0.6_01	Rename			Lees Creek UT of UT 0.0 to 1.3	Mouth to Headwaters	River/Stream	496181	1.30	MILES	2006	5	Licking River	Mason	0.00	1.30	38.52548	-83.83017	38.51971	-83.85247	2020
KY-1055	KY496194_01	Rename			Left Fork Beaver Creek 0.0 to 11.4	Mouth to Frasure Creek	River/Stream	496194	11.40	MILES	2010	5	Big Sandy River	Floyd	0.00	11.40	37.55901	-82.75218	37.45399	-82.74049	2020
KY-1056	KY496194_02	Rename			Left Fork Beaver Creek 11.4 to 13.65	Frasure Creek to Spewing Camp Branch	River/Stream	496194	2.25	MILES	2010	5	Big Sandy River	Floyd	11.40	13.65	37.45399	-82.74049	37.43023	-82.73447	2020
KY-1057	KY496194_03	Rename			Left Fork Beaver Creek 13.65 to 18.8	Spewing Camp Branch to Clear Creek	River/Stream	496194	5.15	MILES	2010	5	Big Sandy River	Floyd	13.65	18.80	37.43023	-82.73447	37.38919	-82.73118	2020
KY-1058	KY496194_04	Rename			Left Fork Beaver Creek 18.8 to 28.8	Otter Creek to Confluence with Skull Fork and Abe Fork	River/Stream	496194	10.00	MILES	2010	5	Big Sandy River	Floyd	18.80	28.80	37.38919	-82.73118	37.30235	-82.71128	2020
KY-2341	KY513303_01	Rename			Left Fork Big Double Creek 0.0 to 1.6	Mouth to Headwaters	River/Stream	513303	1.60	MILES	2020	2	Kentucky River	Clay	0.00	1.60	37.09053	-83.60245	37.07459	-83.61736	2020
KY-1059	KY496198_01	Rename			Left Fork Blackberry Creek 1.80 to 4.5	Oldhouse Branch to Headwaters	River/Stream	496198	2.70	MILES	2016	5	Big Sandy River	Pike	1.80	4.50	37.52935	-82.19802	37.50935	-82.23252	2020
KY-1060	KY496199_01	Rename			Left Fork Blaine Creek 0.0 to 2.1	Mouth to Keaton Fork	River/Stream	496199	2.10	MILES	2004	5	Big Sandy River	Lawrence	0.00	2.10	38.00734	-82.91305	37.99855	-82.93813	2020
KY-2342	KY513306_01	Rename			Left Fork Buffalo Creek 0.0 to 3.25	Confluence with Right Fork Buffalo Creek to Confluence with Lucky Fork and Laurel Fork	River/Stream	513306	3.25	MILES	2000	2	Kentucky River	Owsley	0.00	3.25	37.35197	-83.63583	37.35713	-83.59366	2020
KY-1061	KY496205_01	Rename			Left Fork Caney Creek 0.0 to 2.6	Mouth to Headwaters	River/Stream	496205	2.60	MILES	2016	5	Big Sandy River	Pike	0.00	2.60	37.31613	-82.54905	37.31455	-82.50603	2020
KY-2343	KY513310_01	Rename			Left Fork Elisha Creek 0.0 to 4.05	Mouth to Headwaters	River/Stream	513310	4.05	MILES	2006	2	Kentucky River	Leslie	0.00	4.05	37.08528	-83.52645	37.09032	-83.47076	2020
KY-2344	KY513312_01	Rename			Left Fork Fugitt Creek 0.0 to 1.5	Mouth to Headwaters	River/Stream	513312	1.50	MILES	2012	2	Upper Cumberland River	Harlan	0.00	1.50	36.92528	-83.04509	36.93670	-83.02486	2020
KY-1065	KY496251_01	Rename			Left Fork Howards Creek 0.0 to 1.2	Mouth to Source	River/Stream	496251	1.20	MILES	2004	5	Little Sandy River	Elliott	0.00	1.20	38.07346	-83.12612	38.05773	-83.12091	2020
KY-2345	KY513314_01	Rename			Left Fork Island Creek 0.0 to 5.0	Mouth to Holly Fork	River/Stream	513314	5.00	MILES	2000	5	Kentucky River	Owsley	0.00	5.00	37.37773	-83.69185	37.36653	-83.76846	2020
KY-38	KY2543437_01	Rename			Left Fork Johnson Creek 0.0 to 3.2	Mouth to Burton Fork	River/Stream	2543437	3.20	MILES	2010	5	Licking River	Magoffin	0.00	3.20	37.74099	-83.20080	37.71458	-83.23504	2020
KY-1062	KY496239_01	Rename			Left Fork Malachi Branch 0.0 to 0.7	Mouth to Headwaters	River/Stream	496239	0.70	MILES	2008	5	Big Sandy River	Pike	0.00	0.70	37.52895	-82.06562	37.52164	-82.07347	2020
KY-3176					Left Fork Martins Fork Cumberland River 0.0 to 1.75	Mouth to Headwaters	River/Stream	496240	1.75	MILES	2020	4C	Upper Cumberland River	Harlan	0.00	1.75	36.68690	-83.41268	36.66980	-83.43099	2020
KY-1063	KY496241_01	Rename			Left Fork Middle Creek Levisa Fork 0.0 to 9.65	Mouth to Headwaters	River/Stream	496241	9.65	MILES	2020	5	Big Sandy River	Floyd	0.00	9.65	37.64980	-82.81445	37.54721	-82.87286	2020
KY-1064	KY496243_01	Rename			Left Fork Millstone Creek 1.6 to 3.0	Right Fork to Headwaters	River/Stream	496243	1.40	MILES	2010	5	Kentucky River	Letcher	1.60	3.00	37.19889	-82.76200	37.21381	-82.77177	2020
KY-2346	KY513326_01	Rename			Left Fork Straight Creek 0.0 to 13.6	Mouth to Headwaters	River/Stream	513326	13.60	MILES	2008	5	Upper Cumberland River	Bell	0.00	13.60	36.77387	-83.66898	36.90029	-83.56243	2020
KY-1066	KY496266_01	Rename			Left Fork Troublesome Creek 2.8 to 6.7	Mill Creek to Headwaters	River/Stream	496266	3.90	MILES	2016	5	Kentucky River	Knott	2.80	6.70	37.34710	-82.95006	37.37917	-82.91073	2020
KY-1067	KY496271_01	Rename			Left Fork White Oak Creek 0.0 to 1.95	Mouth to 2nd UT on Left	River/Stream	496271	1.95	MILES	2000	5	Licking River	Morgan	0.00	1.95	38.75811	-83.87400	38.75023	-83.88147	2020
KY-2990		Split	KY-1068	KY496312_01	Levisa Fork 0.0 to 1.6	Mouth to 1 mile upstream of Louisa Municipal Water Works	River/Stream	496312	1.60	MILES	2020	5	Big Sandy River	Lawrence	0.00	1.60	38.11815	-82.60162	38.09622	-82.59248	2020
KY-2991		Split	KY-1068	KY496312_01	Levisa Fork 1.6 to 5.8	1 Mile Upstream of Louisa Municipal Water Works to UT (Torchlight Hollow)	River/Stream	496312	4.20	MILES	2020	5	Big Sandy River	Lawrence	1.60	5.80	38.09622	-82.59248	38.05081	-82.61646	2020
KY-1075	KY496312_08	Rename			Levisa Fork 118.15 to 127.1	Big Creek to KY/VA Stateline	River/Stream	496312	8.95	MILES	2020	5	Big Sandy River	Pike	118.15	127.10	37.42673	-82.26459	37.36370	-82.21762	2020
KY-1070	KY496312_03	Rename			Levisa Fork 15.2 to 31.2	Georges Creek to Toms Creek	River/Stream	496312	16.00	MILES	2006	2	Big Sandy River	Johnson, Lawrence	15.20	31.20	37.97624	-82.66581	37.85164	-82.73224	2020
KY-3103		Split	KY-1071	KY496312_04	Levisa Fork 31.2 to 46.95	Toms Creek to Johns Creek	River/Stream	496312	15.75	MILES	2020	5	Big Sandy River	Johnson, Floyd	31.20	46.95	37.85164	-82.73224	37.74193	-82.76698	2020
KY-3102		Split	KY-1071	KY496312_04	Levisa Fork 46.95 to 53.45	Johns Creek to Abbott Creek	River/Stream	496312	6.50	MILES	2020	5	Big Sandy River	Floyd	46.95	53.45	37.74193	-82.76698	37.68716	-82.78300	2020
KY-1069	KY496312_02	Rename			Levisa Fork 5.8 to 15.2	UT (Torchlight Hollow) to Georges Creek	River/Stream	496312	9.40	MILES	2004	5	Big Sandy River	Lawrence	5.80	15.20	38.05081	-82.61646	37.97624	-82.66581	2020
KY-3101		Split	KY-1071	KY496312_04	Levisa Fork 53.45 to 54.55	Abbott Creek to Middle Creek Levisa Fork	River/Stream	496312	1.10	MILES	2020	5	Big Sandy River	Floyd	53.45	54.55	37.68716	-82.78300	37.67201	-82.77907	2020
KY-3100		Split	KY-1073	KY496312_06	Levisa Fork 54.55 to 57.25	Middle Creek Levisa Fork to Point of Withdraw	River/Stream	496312	2.70	MILES	2020	3	Big Sandy River	Pike, Floyd	54.55	57.25	37.67201	-82.77907	37.66758	-82.74424	2020
KY-1072	KY496312_05	Rename			Levisa Fork 57.25 to 58.25	Prestonsburg City Utilities Commission Point of withdrawal to 1 mile upstream (default)	River/Stream	496312	1.00	MILES	2016	2	Big Sandy River	Floyd	57.25	58.25	37.66758	-82.74424	37.66880	-82.72827	2020
KY-3097		Split	KY-1073	KY496312_06	Levisa Fork 65.25 to 66.25	US Filter/Southern Water & Sewer District to 1 Mile Upstream	River/Stream	496312	1.00	MILES	2020	5	Big Sandy River	Floyd	65.25	66.25	37.61319	-82.72663	37.61153	-82.70909	2020
KY-3098		Split	KY-1073	KY496312_06	Levisa Fork 66.25 to 87.8	1 Mile Upstream of US Filter/Southern Water & Sewer District to KY-1426 Cedar Hills Road	River/Stream	496312	21.55	MILES	2020	5	Big Sandy River	Pike, Floyd	66.25	87.80	37.61153	-82.70909	37.46442	-82.52603	2020
KY-3099		Split	KY-1073	KY496312_06	Levisa Fork 87.8 to 88.85	KY-1426 Cedar Hills Road to 1 mile upstream of Pikeville Water Works	River/Stream	496312	1.05	MILES	2020	5	Big Sandy River	Pike	87.80	88.85	37.46442	-82.52603	37.45500	-82.52288	2020
KY-2942		Split	KY-2766		Levisa Fork 88.85 to 97.7	1 Mile upstream of Pikeville Water Works to Russell Fork	River/Stream	496312	8.85	MILES	2020	5	Big Sandy River	Pike	88.85	97.70	37.45500	-82.52286	37.40718	-82.44019	2020
KY-1074	KY496312_07	Rename			Levisa Fork 97.7 to 100.7	Confluence with Russell Fork to Dam	River/Stream	496312	3.00	MILES	2020	5	Big Sandy River	Pike	97.70	100.70	37.40718	-82.44019	37.43363	-82.41498	2020
KY-2347	KY513355_01	Rename			Lewis Branch 0.0 to 1.55	Mouth to Headwaters	River/Stream	513355	1.55	MILES	2012	2	Upper Cumberland River	Jackson	0.00	1.55	37.25819	-83.94056	37.27498	-83.95455	2020
KY-1077	KY496327_01	Rename			Lewis Creek 0.0 to 14.35	Mouth to Headwaters	River/Stream	496327	14.35	MILES	2002	5	Green River	Ohio	0.00	14.35	37.34609	-87.01210	37.35652	-86.84032	2020
KY-1076	KY496324_01	Rename			Lewis Creek 0.0 to 3.6	Mouth to Land Use Change	River/Stream	496324	3.60	MILES	2008	5	Upper Cumberland River	Cumberland	0.00	3.60	36.79790	-85.35054	36.82025	-85.39453	2020
KY-2653	KY517269_00	Rename			Lexington Reservoir Number 01	Dam to Reservoir Boundary	Lake/Reservoir	517269	19	ACRES	2016	2	Kentucky River	Fayette			38.01075	-84.46240	38.01535	-84.46178	2020
KY-2652	KY517207_00	Rename			Lexington Reservoir Number 04	Dam to Lake Boundary	Lake/Reservoir	517207	191	ACRES	2020	2	Kentucky River	Fayette			37.97750	-84.44939	37.98892	-84.43217	2020
KY-1079	KY496458_01	Rename			Lick Branch 0.0 to 1.1	Mouth to Curtis Crum Reservoir	River/Stream	496458	1.10	MILES	2008	5	Big Sandy River	Martin	0.00	1.10	37.78307	-82.61438	37.70199	-82.62785	2020
KY-3206					Lick Branch 0.0 to 1.75	Mouth to Headwaters	River/Stream	513376	1.75	MILES	2020	3	Upper Cumberland River	Pulaski	0.00	1.75	36.94695	-84.49775	36.92511	-84.49386	2020
KY-1078	KY496428_01	Rename			Lick Branch 0.0 to 2.45	Mouth to Forested Headwaters	River/Stream	496428	2.45	MILES	2010	5	Licking River	Magoffin	0.00	2.45	37.69955	-83.15039	37.67280	-83.16327	2020
KY-1080	KY496477_01	Rename			Lick Creek 0.0 to 10.3	Mouth to Headwaters	River/Stream	496477	10.30	MILES	2020	2	Green River	Simpson	0.00	10.30	36.80165	-86.49463	36.69326	-86.44698	2020
KY-1087	KY496487_01	Rename			Lick Creek 0.0 to 11.85	Mouth to UT	River/Stream	496487	11.85	MILES	2004	5	Tradewater River	Hopkins	0.00	11.85	37.34175	-87.78401	37.25203	-87.69080	2020
KY-1081	KY496478_01	Rename			Lick Creek 0.0 to 2.2	Mouth to UT	River/Stream	496478	2.20	MILES	2008	5	Mississippi River	Carlisle	0.00	2.20	36.90682	-88.86955	36.87906	-88.86256	2020
KY-1085	KY496483_01	Rename			Lick Creek 0.0 to 2.25	Mouth to Raccoon Creek	River/Stream	496483	2.25	MILES	2006	5	Licking River	Magoffin	0.00	2.25	37.82977	-83.13059	37.80961	-83.12259	2020
KY-2348	KY513397_01	Rename			Lick Creek 0.0 to 3.7	Mouth to UT at MP 3.7	River/Stream	513397	3.70	MILES	2012	4A	Upper Cumberland River	Laurel	0.00	3.70	37.05467	-84.02685	37.09400	-84.02047	2020
KY-1083	KY496482_01	Rename			Lick Creek 0.0 to 3.95	Mouth to UT	River/Stream	496482	3.95	MILES	2002	5	Green River	Henderson	0.00	3.95	37.82291	-87.38936	37.80045	-87.39659	2020
KY-606	KY496470_01	Rename			Lick Creek 0.0 to 4.1	Mouth to 0.1 Miles below Dam	River/Stream	496470	4.10	MILES	2006	2	Salt River	Washington	0.00	4.10	37.81833	-85.21556	37.82616	-85.16402	2020
KY-607	KY496473_01	Rename			Lick Creek 0.0 to 5.4	Mouth to I-71	River/Stream	496473	5.40	MILES	2004	5	Kentucky River	Carroll, Gallatin	0.00	5.40	38.65265	-84.95444	38.69592	-84.92682	2020
KY-3207					Lick Creek 0.0 to 9.8	Mouth to land use change	River/Stream	496481	9.80	MILES	2020	4C	Salt River	Nelson	0.00	9.80	37.76491	-85.67445	37.80987	-85.57122	2020
KY-1082	KY496480_01	Rename			Lick Creek 0.3 to 4.85	Levisa Fork Backwaters to Headwaters	River/Stream	496480	4.55	MILES	2010	5	Big Sandy River	Pike	0.30	4.85	37.40672	-82.31429	37.35014	-82.30052	2020
KY-1086	KY496483_02	Rename			Lick Creek 2.25 to 4.75	Raccoon Creek to Buffalo Creek	River/Stream	496483	2.50	MILES	2010	5	Licking River	Magoffin	2.25	4.75	37.80961	-83.12259	37.79514	-83.09238	2020
KY-1084	KY496482_02	Rename			Lick Creek 5.15 to 14.05	UT to Headwaters	River/Stream	496482	8.90	MILES	2006	5	Green River	Henderson	5.15	14.05	37.79878	-87.41086	37.74310	-87.40946	2020
KY-2349	KY513401_01	Rename			Lick Fork 0.0 to 1.25	Mouth to Headwaters	River/Stream	513401	1.25	MILES	2008	5	Upper Cumberland River	Harlan	0.00	1.25	36.92688	-83.05436	36.94363	-83.04851	2020
KY-1089	KY496508_01	Rename			Lick Fork 0.0 to 2.9	Mouth to Headwaters	River/Stream	496508	2.90	MILES	2002	2	Upper Cumberland River	Bell	0.00	2.90	36.62857	-83.73373	36.66088	-83.75530	2020
KY-1088	KY496506_01	Rename			Lick Fork 0.0 to 5.15	Mouth to Headwaters	River/Stream	496506	5.15	MILES	2004	5	Little Sandy River	Elliott	0.00	5.15	38.06120	-83.05223	38.01126	-83.01281	2020
KY-2350	KY513414_01	Rename			Lick Run 0.0 to 3.3	Mouth to UT	River/Stream	513414	3.30	MILES	2010	5	Ohio River	Breckinridge	0.00	3.30	37.93978	-86.50576	37.95224	-86.48520	2020
KY-2351	KY513416_01	Rename			Licking River 0.1 to 4.75	Ohio River backwater to Northern Kentucky Water Service Intake (0.1 river miles upstream Banklick Creek)	River/Stream	513416	4.65	MILES	2020	4A	Licking River	Campbell, Kenton	0.10	4.75	39.09132	-84.50320	39.03158	-84.48992	2020
KY-2356	KY513416_07	Rename			Licking River 102.3 to 103.3	Western Fleming Water District Intake to 1 mile upstream	River/Stream	513416	1.00	MILES	2020	2	Licking River	Nicholas	102.30	103.30	38.42437	-83.98180	38.41225	-83.98645	2020
KY-2822					Licking River 103.3 to 109.9	1 mile upstream Western Fleming Water District Intake to Carlisle Water Department Intake	River/Stream	513416	6.60	MILES	2020	3	Licking River	Nicholas	103.30	109.90	38.41225	-83.98645	38.35941	-83.94930	2020
KY-2996		Split	KY-2863		Licking River 109.9 to 110.9	Carlisle Water Department Intake to 1 mile upstream	River/Stream	513416	1.00	MILES	2020	2	Licking River	Nicholas	109.90	110.90	38.35941	-83.94930	38.36720	-83.93671	2020
KY-2995		Split	KY-2863		Licking River 110.9 to 117.35	1 Mile Upstream of Carlisle Water Department Intake to 1.3 River Miles Upstream of Fishtrap Creek	River/Stream	513416	6.45	MILES	2020	2	Licking River	Fleming, Nicholas	110.90	117.35	38.36720	-83.93671	38.35982	-83.88405	2020
KY-2864		Split	KY-2357	KY513416_08	Licking River 117.35 to 129.95	1.3 River Miles Upstream of Fishtrap Creek to Flat Creek	River/Stream	513416	12.60	MILES	2020	2	Licking River	Bath, Fleming, Nicholas	117.35	129.95	38.35982	-83.88405	38.27916	-83.80168	2020
KY-2711					Licking River 138.3 to 140.3	Unnamed Tributary to 0.1 River Miles Upstream of Turkey Run	River/Stream	513416	2.00	MILES	2020	3	Licking River	Bath, Fleming	138.30	140.30	38.27224	-83.73701	38.26861	-83.71665	2020
KY-2823					Licking River 144.0 to 145.0	1 River Mile Downstream of Fox Creek to Fox Creek	River/Stream	513416	1.00	MILES	2020	3	Licking River	Bath, Fleming	144.00	145.00	38.25141	-83.69320	38.26038	-83.68710	2020
KY-2866		Split	KY-2358	KY513416_09	Licking River 145.0 to 146.1	Fox Creek to 0.75 River Miles Downstream of Haven Branch	River/Stream	513416	1.10	MILES	2020	2	Licking River	Bath, Fleming	145.00	146.10	38.26038	-83.68710	38.24770	-83.69193	2020
KY-2865		Split	KY-2358	KY513416_09	Licking River 146.1 to 148.4	0.75 River Miles Downstream of Haven Branch to Slate Creek	River/Stream	513416	2.30	MILES	2002	2	Licking River	Bath, Fleming	146.10	148.40	38.24770	-83.69193	38.21830	-83.69828	2020
KY-2359	KY513416_10	Rename			Licking River 159.3 to 170.4	SR 211 to Unnamed Road off Slatey Point Road	River/Stream	513416	11.10	MILES	2008	2	Licking River	Rowan, Bath	159.30	170.40	38.17659	-83.61805	38.13064	-83.60581	2020
KY-2896		Split	KY-2360	KY513416_11	Licking River 174.2 to 175.35	Triplett Creek to US 60	River/Stream	513416	1.15	MILES	2020	5	Licking River	Bath, Rowan	174.20	175.35	38.14595	-83.56719	38.13995	-83.55774	2020
KY-2998		Split	KY-2897		Licking River 175.35 to 176.4	US-60 to Morehead Utility Plant Board	River/Stream	513416	1.05	MILES	2020	5	Licking River	Bath, Rowan	175.35	176.40	38.13995	-83.55774	38.13138	-83.54941	2020
KY-2997		Split	KY-2897		Licking River 176.4 to 177.4	Morehead Utility Plant Board to 1 Mile Upstream	River/Stream	513416	1.00	MILES	2020	5	Licking River	Bath, Rowan	176.40	177.40	38.13138	-83.54941	38.12095	-83.55467	2020
KY-2999		Split	KY-2897		Licking River 177.4 to 179.45	1 Mile Upstream from Morehead Utility Plant Board to Cave Run Lake Dam	River/Stream	513416	2.05	MILES	2020	5	Licking River	Bath, Rowan	177.40	179.45	38.12095	-83.55467	38.11777	-83.53434	2020
KY-2745					Licking River 19.15 to 30.75	KY-536 Creektrace Road to Grassy Creek	River/Stream	513416	11.60	MILES	2020	3	Licking River	Campbell, Kenton	19.15	30.75	38.92019	-84.44823	38.80631	-84.41848	2020
KY-2361	KY513416_12	Rename			Licking River 222.4 to 239.45	Elk Fork to White Oak Creek	River/Stream	513416	17.05	MILES	2020	5	Licking River	Morgan	222.40	239.45	37.94183	-83.28393	37.87617	-83.19925	2020
KY-2362	KY513416_12.5	Rename			Licking River 247.9 to 263.2	Lick Creek Confluence to Middle Fork Licking River Confluence	River/Stream	513416	15.30	MILES	2016	5	Licking River	Magoffin	247.90	263.20	37.82977	-83.13059	37.75376	-83.11998	2020
KY-2363	KY513416_13	Rename			Licking River 263.2 to 269.8	Middle Fork of Licking River to Horsepen Fork	River/Stream	513416	6.60	MILES	2012	5	Licking River	Magoffin	263.20	269.80	37.75376	-83.11998	37.75014	-83.06872	2020
KY-3104		Split	KY-2364	KY513416_14	Licking River 269.8 to 271.35	Horsepen Fork (Salyersville) to Salyersville Municipal Water Works	River/Stream	513416	1.55	MILES	2020	5	Licking River	Magoffin	269.80	271.35	37.75014	-83.06872	37.73684	-83.07163	2020
KY-3105		Split	KY-2364	KY513416_14	Licking River 271.35 to 272.35	Salyersville Municipal Water Works to 1 Mile Upstream	River/Stream	513416	1.00	MILES	2020	5	Licking River	Magoffin	271.35	272.35	37.73684	-83.07163	37.73046	-83.05693	2020
KY-3106		Split	KY-2364	KY513416_14	Licking River 272.35 to 292.4	1 Mile Upstream from Salyersville Municipal Water Works to Trace Fork	River/Stream	513416	20.05	MILES	2020	5	Licking River	Magoffin	272.35	292.40	37.73046	-83.05693	37.60097	-82.96082	2020
KY-2365	KY513416_15	Rename			Licking River 292.4 to 300.85	Trace Fork Confluence to Grassy Creek Confluence	River/Stream	513416	8.45	MILES	2010	5	Licking River	Magoffin	292.40	300.85	37.60097	-82.96082	37.53898	-82.92741	2020
KY-2353	KY513416_04	Rename			Licking River 30.75 to 37.4	Grassy Creek to Flour Creek	River/Stream	513416	6.65	MILES	2020	5	Licking River	Campbell, Pendleton	30.75	37.40	38.80631	-84.41848	38.78904	-84.34401	2020
KY-2746					Licking River 37.4 to 52.5	Flour Creek to Falmouth Water Plant Intake	River/Stream	513416	15.10	MILES	2020	3	Licking River	Pendleton	37.40	52.50	38.78904	-84.34401	38.67592	-84.32484	2020
KY-2914		Split	KY-2352	KY513416_02	Licking River 4.75 to 5.75	Northern Kentucky Water Service Intake to 1 Mile Upstream	River/Stream	513416	1.00	MILES	2020	4A	Licking River	Kenton, Campbell	4.75	5.75	39.03158	-84.48992	39.01739	-84.48666	2020
KY-2913		Split	KY-2352	KY513416_02	Licking River 5.75 to 14.7	1 Mile Upstream of Northern Kentucky Water Service to Scaffold Creek	River/Stream	513416	8.95	MILES	2020	4A	Licking River	Kenton, Campbell	5.75	14.70	39.01739	-84.48666	38.96807	-84.43538	2020
KY-2354	KY513416_05	Rename			Licking River 52.5 to 53.5	Falmouth Water Plant Intake to 1 mile upstream	River/Stream	513416	1.00	MILES	2012	2	Licking River	Pendleton	52.50	53.50	38.67592	-84.32484	38.67857	-84.30716	2020
KY-2747					Licking River 53.5 to 76.6	1 mile upstream Falmouth Water Plant Intake to Harrison Creek	River/Stream	513416	23.10	MILES	2020	3	Licking River	Pendleton, Bracken, Harrison	53.50	76.60	38.67857	-84.30716	38.53798	-84.20804	2020
KY-2922		Split	KY-2355	KY513416_06	Licking River 76.6 to 84.3	Harrison Creek to Cynthiana Municipal Water Works	River/Stream	513416	7.70	MILES	2020	5	Licking River	Harrison, Robertson	76.60	84.30	38.53798	-84.20804	38.48613	-84.17127	2020
KY-2924		Split	KY-2355	KY513416_06	Licking River 84.3 to 85.3	Cynthiana Municipal Water Works to 1 Mile Upstream	River/Stream	513416	1.00	MILES	2020	5	Licking River	Harrison, Robertson	84.30	85.30	38.48613	-84.17127	38.48950	-84.15451	2020
KY-2923		Split	KY-2355	KY513416_06	Licking River 85.3 to 88.7	1 Mile Upstream of Cynthiana Municipal Water to Cedar Creek	River/Stream	513416	3.40	MILES	2020	5	Licking River	Harrison, Robertson	85.30	88.70	38.48950	-84.15451	38.47622	-84.12334	2020
KY-2748					Licking River 88.7 to 102.3	Cedar Creek to Western Fleming Water District Intake	River/Stream	513416	13.60	MILES	2020	3	Licking River	Robertson, Nicholas, Harrison	88.70	102.30	38.47622	-84.12334	38.42437	-83.98180	2020
KY-2286	KY513416-159.2_01	Rename			Licking River UT 0.0 to 1.25	Mouth to Headwaters	River/Stream	513416	1.25	MILES	2012	4C	Licking River	Bath	0.00	1.25	38.17555	-83.61961	38.16614	-83.63434	2020
KY-3208					Licking River UT 0.0 to 1.5	Mouth to Headwaters	River/Stream	513416	1.50	MILES	2020	2	Licking River	Fleming	0.00	1.50	38.33272	-83.84163	38.33973	-83.82429	2020
KY-1090	KY496567_01	Rename			Linders Creek 0.0 to 7.95	Mouth to Sutzer Creek	River/Stream	496567	7.95	MILES	2020	2	Green River	Hardin	0.00	7.95	37.63686	-86.20187	37.63368	-86.14513	2020
KY-1091	KY496578_01	Rename			Lindy Creek 0.0 to 0.9	Mouth to 0.1 miles above UT (at MP 0.8)	River/Stream	496578	0.90	MILES	2004	5	Green River	Hart	0.00	0.90	37.39022	-85.70342	37.39067	-85.68942	2020
KY-1092	KY496583_01	Rename			Line Creek 0.0 to 7.2	Mouth to KY/TN State Line	River/Stream	496583	7.20	MILES	2004	2	Green River	Monroe	0.00	7.20	36.65422	-85.81811	36.62205	-85.78873	2020
KY-2287	KY513433_01	Rename			Line Creek 2.4 to 5.4	Buffalo Branch to Dyer Branch	River/Stream	513433	3.00	MILES	2006	5	Upper Cumberland River	Pulaski	2.40	5.40	37.17102	-84.31208	37.19392	-84.34695	2020
KY-2366	KY513437_02	Rename			Line Fork 12.2 to 28.65	Defeated Creek to Headwaters	River/Stream	513437	16.45	MILES	2016	5	Kentucky River	Letcher	12.20	28.65	37.05324	-82.98863	36.96159	-83.14774	2020
KY-2288	KY513437_01	Rename			Line Fork 9.3 to 12.2	Big Branch to Defeated Creek	River/Stream	513437	2.90	MILES	2004	5	Kentucky River	Letcher	9.30	12.20	37.07803	-82.98437	37.05324	-82.98858	2020
KY-2367	KY513437-9.85_01	Rename			Line Fork UT 0.0 to 0.55	Mouth to Headwaters	River/Stream	513437	0.55	MILES	2020	2	Kentucky River	Letcher	0.00	0.55	37.07769	-82.99241	37.07755	-83.00186	2020
KY-1093	KY496604_01	Rename			Little Barren River 0.0 to 9.8	Mouth to Trammel Creek	River/Stream	496604	9.80	MILES	2020	5	Green River	Hart, Green	0.00	9.80	37.27821	-85.67881	37.20002	-85.64179	2020
KY-1094	KY496604_02	Rename			Little Barren River 9.8 to 15.8	Trammell Creek to Greasy Creek	River/Stream	496604	6.00	MILES	2008	4A	Green River	Green	9.80	15.80	37.20002	-85.64179	37.16178	-85.63633	2020
KY-1098	KY496607_01	Rename			Little Bayou Creek 0.0 to 7.9	Mouth to Headwaters	River/Stream	496607	7.90	MILES	2010	5	Ohio River	McCracken	0.00	7.90	37.16868	-88.80022	37.08640	-88.81071	2020
KY-1095	KY496606_01	Rename			Little Bayou de Chien 1.1 to 2.4	Old Relict Channel for Bayou de Chien to below SR 239	River/Stream	496606	1.30	MILES	2002	5	Mississippi River	Fulton, Hickman	1.10	2.40	36.60230	-89.04795	36.59583	-89.03396	2020
KY-1096	KY496606_02	Rename			Little Bayou de Chien 11.7 to 14.0	UT above SR 1125 to UT (land use change)	River/Stream	496606	2.30	MILES	2002	5	Mississippi River	Fulton	11.70	14.00	36.53572	-88.96249	36.52770	-88.92563	2020
KY-1097	KY496606-10.4-3.0_01	Rename			Little Bayou de Chien UT of UT 0.0 to 0.9	Mouth to Headwaters	River/Stream	496606	0.90	MILES	2012	5	Mississippi River	Fulton	0.00	0.90	36.51287	-88.99558	36.50704	-89.00710	2020
KY-1099	KY496612_01	Rename			Little Beaver Creek 0.0 to 3.3	Mouth to Headwaters	River/Stream	496612	3.30	MILES	2006	5	Licking River	Harrison	0.00	3.30	38.49281	-84.20446	38.46387	-84.24449	2020
KY-1100	KY496615_01	Rename			Little Beaverdam Creek 0.0 to 11.4	Mouth to Land Use Change	River/Stream	496615	11.40	MILES	2014	2	Green River	Warren, Edmonson	0.00	11.40	37.17492	-86.34745	37.09890	-86.31480	2020
KY-1101	KY496616_01	Rename			Little Bee Creek 0.0 to 2.15	Mouth to below pond in Headwaters	River/Stream	496616	2.15	MILES	2012	5	Tennessee River	Marshall	0.00	2.15	36.87463	-88.38052	36.85466	-88.40668	2020
KY-57	KY2743838_01	Rename			Little Bee Lick Creek 0.0 to 2.7	Mouth to Headwaters	River/Stream	2743838	2.70	MILES	2014	4A	Salt River	Jefferson	0.00	2.70	38.11212	-85.74822	38.08293	-85.73322	2020
KY-3209					Little Beech Creek 1.8 to 9.9	Taylorsville Lake to Blue Stone Creek	River/Stream	496617	8.10	MILES	2020	2	Salt River	Spencer	1.80	9.90	38.02254	-85.24709	38.03469	-85.16087	2020
KY-19	KY2094696_01	Rename			Little Blackwater Creek 0.0 to 5.7	Mouth to Headwaters	River/Stream	2094696	5.70	MILES	2010	5	Licking River	Menifee, Morgan, Wolfe	0.00	5.70	37.87207	-83.44894	37.86028	-83.51595	2020
KY-1102	KY496646_01	Rename			Little Brush Creek 3.2 to 13.2	Sinks of Little Brush Creek to UT confluence near Coakley	River/Stream	496646	10.00	MILES	2008	4A	Green River	Green	3.20	13.20	37.32547	-85.60486	37.37717	-85.53609	2020
KY-2369	KY513462_01	Rename			Little Caney Creek 0.0 to 2.0	Mouth to Poorhouse Fork Confluence	River/Stream	513462	2.00	MILES	2010	5	Licking River	Morgan	0.00	2.00	37.89753	-83.29099	37.87368	-83.29745	2020
KY-1103	KY496662_01	Rename			Little Carr Fork 0.0 to 4.8	Entire stream - Carr Fork to source	River/Stream	496662	4.80	MILES	2010	5	Kentucky River	Knott	0.00	4.80	37.24113	-82.94628	37.23325	-82.88107	2020
KY-1104	KY496663_01	Rename			Little Cat Fork 1.2 to 3.7	Miller Branch to Stable Branch	River/Stream	496663	2.50	MILES	2016	5	Big Sandy River	Lawrence	1.20	3.70	38.18603	-82.72449	38.18368	-82.75770	2020
KY-1105	KY496670_01	Rename			Little Clear Creek 0.0 to 10.9	Mouth to Headwaters	River/Stream	496670	10.90	MILES	2008	5	Upper Cumberland River	Bell	0.00	10.90	36.72791	-83.72828	36.65901	-83.81013	2020
KY-1106	KY496690_01	Rename			Little Creek 0.0 to 5.35	Mouth to confluence with McClane Creek and Barnes Creek	River/Stream	496690	5.35	MILES	2020	5	Mississippi River	Carlisle, Hickman	0.00	5.35	36.76672	-88.91257	36.77554	-88.82380	2020
KY-1109	KY496699_01	Rename			Little Cypress Creek 0.0 to 2.1	Mouth to UT	River/Stream	496699	2.10	MILES	2000	5	Mississippi River	Graves	0.00	2.10	36.63380	-88.67970	36.61419	-88.65711	2020
KY-1110	KY496700_01	Rename			Little Cypress Creek 0.0 to 3.4	Mouth to Angle Creek	River/Stream	496700	3.40	MILES	2020	5	Tennessee River	Marshall	0.00	3.40	37.02990	-88.45070	37.01091	-88.43096	2020
KY-1113	KY496701_01	Rename			Little Cypress Creek 0.0 to 8.7	Mouth to State Road 181	River/Stream	496701	8.70	MILES	2010	5	Green River	Muhlenberg	0.00	8.70	37.32012	-87.17301	37.25251	-87.19679	2020
KY-1108	KY496697_02	Rename			Little Cypress Creek 0.75 to 6.65	Extensive Channelization to Headwaters	River/Stream	496697	5.90	MILES	2002	2	Mississippi River	Hickman	0.75	6.65	36.72882	-88.88037	36.66308	-88.90545	2020
KY-1111	KY496700_02	Rename			Little Cypress Creek 3.4 to 6.0	Angle Creek to UT	River/Stream	496700	2.60	MILES	2002	5	Tennessee River	Marshall	3.40	6.00	37.01091	-88.43096	36.99077	-88.44310	2020
KY-1112	KY496700_03	Rename			Little Cypress Creek 7.4 to 7.9	UT to Point of Discharge	River/Stream	496700	0.50	MILES	2012	3	Tennessee River	Marshall	7.40	7.90	36.98032	-88.46019	36.97635	-88.46711	2020
KY-1114	KY496701_02	Rename			Little Cypress Creek 8.7 to 10.0	State Road 181 to headwaters	River/Stream	496701	1.30	MILES	2010	5	Green River	Muhlenberg	8.70	10.00	37.25251	-87.19679	37.24325	-87.21618	2020
KY-1115	KY496701-3.1_01	Rename			Little Cypress Creek UT 0.0 to 2.65	Mouth to Headwaters	River/Stream	496701	2.65	MILES	2010	5	Green River	Muhlenberg	0.00	2.65	37.30001	-87.13844	37.27109	-87.11045	2020
KY-1117	KY496701-4.0_01	Rename			Little Cypress Creek UT 0.0 to 2.65	Mouth to Headwaters	River/Stream	496701	2.65	MILES	2010	5	Green River	Muhlenberg	0.00	2.65	37.27876	-87.14584	37.24376	-87.13904	2020
KY-1116	KY496701-0.9-4.0_01	Rename			Little Cypress Creek UT of UT 0.0 to 1.9	Mouth to Headwaters	River/Stream	496701	1.90	MILES	2010	5	Green River	Muhlenberg	0.00	1.90	37.27858	-87.14596	37.26069	-87.12244	2020
KY-3162					Little Dog Creek 0.65 to 4.55	Nolin Lake Backwaters to Headwaters	River/Stream	496705	3.90	MILES	2020	2	Green River	Hart	0.65	4.55	37.30728	-86.12531	37.30434	-86.06510	2020
KY-3142					Little Dry Fork 0.0 to 1.15	Mouth to headwaters	River/Stream	496711	1.15	MILES	2020	5	Kentucky River	Letcher	0.00	1.15	37.12904	-82.86254	37.13564	-82.84638	2020
KY-1118	KY496722_01	Rename			Little Flat Creek 0.0 to 2.3	Mouth to Jerdan Branch	River/Stream	496722	2.30	MILES	2000	2	Licking River	Bath	0.00	2.30	38.30141	-83.84175	38.27864	-83.86142	2020
KY-1119	KY496733_01	Rename			Little Fork 0.0 to 0.5	Mouth to Headwaters	River/Stream	496733	0.50	MILES	2008	2	Big Sandy River	Pike	0.00	0.50	37.55323	-82.08800	37.54757	-82.09316	2020
KY-1123	KY496737_04	Rename			Little Fork Little Sandy River 12.15 to 23.8	Dry Fork to Blaine Trace	River/Stream	496737	11.65	MILES	2016	5	Little Sandy River	Elliott, Carter	12.15	23.80	38.21410	-82.90754	38.15120	-82.92997	2020
KY-1120	KY496737_01	Rename			Little Fork Little Sandy River 2.3 to 5.0	Robin Run to Powell Creek	River/Stream	496737	2.70	MILES	2016	2	Little Sandy River	Carter	2.30	5.00	38.29601	-82.92770	38.27970	-82.91834	2020
KY-1124	KY496737_05	Rename			Little Fork Little Sandy River 23.8 to 29.8	Blaine Trace to Hurricane Creek	River/Stream	496737	6.00	MILES	2004	5	Little Sandy River	Elliott	23.80	29.80	38.15120	-82.92997	38.10838	-82.95549	2020
KY-1125	KY496737_06	Rename			Little Fork Little Sandy River 29.8 to 33.05	Hurricane Creek to Wallow Hole Creek	River/Stream	496737	3.25	MILES	2004	5	Little Sandy River	Elliott	29.80	33.05	38.10838	-82.95549	38.08449	-82.98129	2020
KY-1121	KY496737_02	Rename			Little Fork Little Sandy River 5.0 to 6.05	Powell Creek to Straight Creek	River/Stream	496737	1.05	MILES	2010	5	Little Sandy River	Carter	5.00	6.05	38.27970	-82.91834	38.26987	-82.91252	2020
KY-1122	KY496737_03	Rename			Little Fork Little Sandy River 6.05 to 12.15	Straight Creek to Dry Fork	River/Stream	496737	6.10	MILES	2010	5	Little Sandy River	Carter	6.05	12.15	38.26987	-82.91252	38.21410	-82.90754	2020
KY-1126	KY496745_01	Rename			Little Goose Creek 0.0 to 9.5	Goose Creek to Headwaters	River/Stream	496745	9.50	MILES	2020	5	Ohio River	Jefferson	0.00	9.50	38.31702	-85.64166	38.28729	-85.54207	2020
KY-2708					Little Hardwick Creek 0.0 to 4.35	Mouth to Headwaters	River/Stream	513488	4.35	MILES	2020	4A	Kentucky River	Powell, Estill	0.00	4.35	37.80638	-83.91057	37.76916	-83.94206	2020
KY-1127	KY496755-3.0_01	Rename			Little Hood Creek UT 0.0 to 0.2	Mouth to Discharge	River/Stream	496755	0.20	MILES	2010	3	Ohio River	Boyd	0.00	0.20	38.46525	-82.67080	38.46505	-82.67479	2020
KY-2370	KY513491_01	Rename			Little Hurricane Fork 0.0 to 4.4	Mouth to Headwaters	River/Stream	513491	4.40	MILES	2002	2	Upper Cumberland River	McCreary	0.00	4.40	36.89671	-84.44018	36.89679	-84.50175	2020
KY-1128	KY496775_01	Rename			Little Jonathan Creek 0.0 to 3.3	Mouth to Land Use Change	River/Stream	496775	3.30	MILES	2002	2	Tennessee River	Calloway	0.00	3.30	36.72998	-88.23395	36.71678	-88.19107	2020
KY-1129	KY496778_01	Rename			Little Kentucky River 0.0 to 21.35	Ohio River Backwaters (mouth) to White Sulphur Fork	River/Stream	496778	21.35	MILES	2020	2	Salt River	Trimble, Henry, Carroll	0.00	21.35	38.68589	-85.20243	38.49867	-85.27289	2020
KY-1130	KY496778_02	Rename			Little Kentucky River 21.35 to 27.5	White Sulphur Fork to Lake Dam	River/Stream	496778	6.15	MILES	2010	5	Ohio River	Henry	21.35	27.50	38.49867	-85.27289	38.44746	-85.28072	2020
KY-2371	KY513497_01	Rename			Little Laurel River 0.0 to 8.5	Mouth to Sampson Branch	River/Stream	513497	8.50	MILES	2012	5	Upper Cumberland River	Laurel	0.00	8.50	37.00797	-84.11079	37.06547	-84.08976	2020
KY-2373	KY513497_03	Rename			Little Laurel River 12.8 to 15.0	UT (draining London Airport) to Whitley Branch	River/Stream	513497	2.20	MILES	2002	5	Upper Cumberland River	Laurel	12.80	15.00	37.08201	-84.05689	37.10173	-84.05538	2020
KY-2374	KY513497_04	Rename			Little Laurel River 15.0 to 23.9	Whitley Branch to UT	River/Stream	513497	8.90	MILES	2012	4A	Upper Cumberland River	Laurel	15.00	23.90	37.10173	-84.05538	36.86166	-83.65332	2020
KY-2372	KY513497_02	Rename			Little Laurel River 8.5 to 12.8	Sampson Branch to UT (London Airport)	River/Stream	513497	4.30	MILES	2012	5	Upper Cumberland River	Laurel	8.50	12.80	37.06547	-84.08976	37.08201	-84.05689	2020
KY-2375	KY513497-16.05_01	Rename			Little Laurel River UT 0.0 to 1.9	Mouth to East 5th Street / land use change	River/Stream	513497	1.90	MILES	2012	5	Upper Cumberland River	Laurel	0.00	1.90	37.11615	-84.05583	37.13348	-84.07581	2020
KY-2376	KY513497-19.65-1.0_01	Rename			Little Laurel River UT of UT 0.0 to 0.1	Mouth to point of discharge	River/Stream	513497	0.10	MILES	2012	3	Upper Cumberland River	Laurel	0.00	0.10	37.15771	-84.05328	37.15891	-84.05279	2020
KY-1131	KY496794_01	Rename			Little Mayfield Creek 0.0 to 10.6	Mouth to Headwaters	River/Stream	496794	10.60	MILES	2006	5	Mississippi River	Graves, Calloway	0.00	10.60	36.71016	-88.60913	36.63252	-88.48711	2020
KY-1132	KY496797_01	Rename			Little Meeting Creek 0.0 to 3.1	Mouth to Loss of Riparian Buffer (near UT)	River/Stream	496797	3.10	MILES	2014	2	Green River	Hardin	0.00	3.10	37.58021	-86.22664	37.59732	-86.21150	2020
KY-2377	KY513505_01	Rename			Little Middle Fork Elisha Creek 0.0 to 0.75	Mouth to Headwaters	River/Stream	513505	0.75	MILES	2006	2	Kentucky River	Leslie	0.00	0.75	37.08174	-83.51566	37.08750	-83.50586	2020
KY-1133	KY496802_01	Rename			Little Millseat Branch 0.0 to 1.35	Mouth to Headwaters	River/Stream	496802	1.35	MILES	2006	2	Kentucky River	Breathitt	0.00	1.35	37.47206	-83.14624	37.48064	-83.16623	2020
KY-1134	KY496810_01	Rename			Little Mud Creek 0.0 to 1.95	Mouth to UT (Hickman Sewage Disposal Lagoon)	River/Stream	496810	1.95	MILES	2000	5	Mississippi River	Fulton	0.00	1.95	36.58741	-89.13608	36.57694	-89.14348	2020
KY-1135	KY496814_01	Rename			Little Muddy Creek 5.2 to 6.6	UT 0.2 miles below Green River Parkway to US 231	River/Stream	496814	1.40	MILES	2004	5	Green River	Butler	5.20	6.60	37.16137	-86.65853	37.15179	-86.67156	2020
KY-1136	KY496814_02	Rename			Little Muddy Creek 6.6 to 13.2	US 231 to Richland Creek	River/Stream	496814	6.60	MILES	2002	5	Green River	Butler	6.60	13.20	37.15179	-86.67156	37.11458	-86.68568	2020
KY-1138	KY496817_01	Rename			Little Negro Creek 0.0 to 2.45	Mouth to UT	River/Stream	496817	2.45	MILES	2010	2	Kentucky River	Rockcastle	0.00	2.45	37.39375	-84.41432	37.36329	-84.42458	2020
KY-1139	KY496821_01	Rename			Little Paint Creek 3.2 to 6.5	Paintsville Reservoir to Pigeon Creek	River/Stream	496821	3.30	MILES	2010	5	Big Sandy River	Johnson	3.20	6.50	37.87531	-82.96338	37.85492	-82.94611	2020
KY-1140	KY496821_02	Rename			Little Paint Creek 6.5 to 11.65	Pigeon Creek to Caudill Branch	River/Stream	496821	5.15	MILES	2004	5	Big Sandy River	Johnson	6.50	11.65	37.85492	-82.94611	37.80984	-82.94253	2020
KY-1141	KY496827_01	Rename			Little Pitman Creek 0.0 to 10.1	Mouth to Buckhorn Creek	River/Stream	496827	10.10	MILES	2008	4A	Green River	Green, Taylor	0.00	10.10	37.31411	-85.51015	37.34919	-85.38005	2020
KY-1142	KY496827_02	Rename			Little Pitman Creek 10.1 to 11.4	Buckhorn Creek to Trace Fork	River/Stream	496827	1.30	MILES	2008	4A	Green River	Taylor	10.10	11.40	37.34936	-85.38025	37.35627	-85.36192	2020
KY-3263					Little Pitman Creek 11.4 to 14.45	Trace Fork to headwaters	River/Stream	496827	3.05	MILES	2020	5	Green River	Taylor	11.40	14.45	37.35618	-85.36173	37.38747	-85.33015	2020
KY-1143	KY496830_01	Rename			Little Poplar Creek 0.0 to 2.8	Mouth to Fourmile Branch	River/Stream	496830	2.80	MILES	2000	5	Upper Cumberland River	Knox	0.00	2.80	36.78373	-83.95398	36.77988	-83.93450	2020
KY-1144	KY496830_02	Rename			Little Poplar Creek 3.15 to 4.4	Stony Fork to Hubbs Creek	River/Stream	496830	1.25	MILES	2020	5	Upper Cumberland River	Knox	3.15	4.40	36.78093	-83.93033	36.77122	-83.92088	2020
KY-2378	KY513514_01	Rename			Little Raccoon Creek 0.0 to 7.7	Mouth to Headwaters	River/Stream	513514	7.70	MILES	2008	5	Upper Cumberland River	Laurel	0.00	7.70	37.24580	-84.02378	37.18115	-84.08887	2020
KY-3035					Little River 11.65 to 12.65	Hopkinsville Water Environmental Authority to 1 mile upstream	River/Stream	496838	1.00	MILES	2020	3	Lower Cumberland River	Trigg	11.65	12.65	36.88132	-87.85455	36.87046	-87.86044	2020
KY-1145	KY496838_01	Rename			Little River 15.3 to 20.7	Tributary with Cadiz Spring Basin to Sinking Fork	River/Stream	496838	5.40	MILES	2020	5	Lower Cumberland River	Trigg	15.30	20.70	36.85881	-87.83792	36.84631	-87.77998	2020
KY-1146	KY496838_02	Rename			Little River 20.7 to 30.1	Sinking Fork to Potts Creek	River/Stream	496838	9.40	MILES	2020	5	Lower Cumberland River	Trigg	20.70	30.10	36.84631	-87.77998	36.78438	-87.73367	2020
KY-1147	KY496838_03	Rename			Little River 30.1 to 31.5	Potts Creek to Casey Creek	River/Stream	496838	1.40	MILES	2002	5	Lower Cumberland River	Trigg	30.10	31.50	36.78438	-87.73367	36.77793	-87.72181	2020
KY-1148	KY496838_04	Rename			Little River 31.5 to 46.1	Casey Creek to UT	River/Stream	496838	14.60	MILES	2002	5	Lower Cumberland River	Christian, Trigg	31.50	46.10	36.77793	-87.72181	36.73603	-87.58001	2020
KY-1149	KY496838_05	Rename			Little River 46.1 to 57.9	UT to North and South Forks of Little River	River/Stream	496838	11.80	MILES	2002	5	Lower Cumberland River	Christian	46.10	57.90	36.73603	-87.58001	36.80060	-87.51678	2020
KY-2379	KY513518_01	Rename			Little Rockcastle River 0.0 to 2.3	Mouth to Hazel Patch Creek and Wood Creek	River/Stream	513518	2.30	MILES	2020	2	Upper Cumberland River	Laurel	0.00	2.30	37.24262	-84.21786	37.23223	-84.19927	2020
KY-1150	KY496854_01	Rename			Little Russell Creek 0.0 to 6.1	Mouth to Headwaters	River/Stream	496854	6.10	MILES	2008	4A	Green River	Green	0.00	6.10	37.23796	-85.56979	37.17674	-85.54455	2020
KY-1151	KY496857_01	Rename			Little Sandy River 0.0 to 0.15	Ohio River to Outfall	River/Stream	496857	0.15	MILES	2020	5	Little Sandy River	Greenup	0.00	0.15	38.58137	-82.83988	38.57948	-82.84105	2020
KY-1152	KY496857_02	Rename			Little Sandy River 0.6 to 1.6	Greenup Water Plant Water Withdrawal to 1 mile upstream	River/Stream	496857	1.00	MILES	2020	3	Little Sandy River	Greenup	0.60	1.60	38.57454	-82.84548	38.56495	-82.84679	2020
KY-1153	KY496857_03	Rename			Little Sandy River 12.0 to 20.0	Confluence with East Fork to Confluence with Cane Creek	River/Stream	496857	8.00	MILES	2016	5	Little Sandy River	Greenup	12.00	20.00	38.50204	-82.83011	38.44178	-82.86128	2020
KY-1154	KY496857_04	Rename			Little Sandy River 39.95 to 40.95	Grayson Utility Commission Point of withdrawal to 1 mile upstream	River/Stream	496857	1.00	MILES	2016	2	Little Sandy River	Carter	39.95	40.95	38.32238	-82.95130	38.31083	-82.95660	2020
KY-1155	KY496857_05	Rename			Little Sandy River 42.4 to 48.0	Little Fork Little Sandy River to Little Sinking Creek	River/Stream	496857	5.60	MILES	2016	2	Little Sandy River	Carter	42.40	48.00	38.30297	-82.94625	38.27759	-82.99386	2020
KY-1156	KY496857_06	Rename			Little Sandy River 72.45 to 75.3	Laurel Creek to South Ruin Creek	River/Stream	496857	2.85	MILES	2016	5	Little Sandy River	Elliott	72.45	75.30	38.11795	-83.10716	38.09809	-83.12945	2020
KY-2380	KY513524_01	Rename			Little Sexton Creek 0.0 to 2.8	Mouth to Buncomb Creek	River/Stream	513524	2.80	MILES	2000	2	Kentucky River	Clay	0.00	2.80	37.31770	-83.75661	37.32213	-83.79803	2020
KY-1157	KY496859_01	Rename			Little Short Creek 0.0 to 3.1	Mouth to Headwaters	River/Stream	496859	3.10	MILES	2020	2	Green River	Grayson	0.00	3.10	37.55202	-86.57644	37.55605	-86.53039	2020
KY-2381	KY513525_01	Rename			Little Sinking Creek 0.0 to 4.8	Mouth to Dam	River/Stream	513525	4.80	MILES	2020	2	Kentucky River	Lee	0.00	4.80	37.64896	-83.75982	37.70442	-83.73047	2020
KY-1158	KY496862_01	Rename			Little Sinking Creek 0.0 to 6.5	Mouth to Headwaters	River/Stream	496862	6.50	MILES	2004	2	Little Sandy River	Carter	0.00	6.50	38.27759	-82.99386	38.28374	-83.07935	2020

KY-1261	KY497908-0.65_01	Rename			McKinney Branch UT 0.0 to 2.45	Mouth to Headwaters	River/Stream	497908	2.45 MILES	2016 4A	Kentucky River	Lincoln	0.00	2.45	37.47283	-84.77187	37.44358	-84.77410	2020
KY-1263	KY497957_01	Rename			Meade Branch 0.0 to 0.1	Mouth to Outfall	River/Stream	497957	0.10 MILES	2010 3	Big Sandy River	Lawrence	0.00	0.10	37.99150	-82.65879	37.99246	-82.66014	2020
KY-1264	KY497961_01	Rename			Meade Run 0.0 to 1.1	Mouth (Ohio River) to default 1 mile upstream	River/Stream	497961	1.10 MILES	2010 2	Ohio River	Greenup	0.00	1.10	38.53446	-82.70701	38.53663	-82.69488	2020
KY-1265	KY497976_01	Rename			Meadow Branch 0.0 to 1.45	Mouth to Headwaters	River/Stream	497976	1.45 MILES	2004 2	Little Sandy River	Elliott	0.00	1.45	38.07711	-82.99544	38.06522	-82.97924	2020
KY-1267	KY497983_01	Rename			Meadow Creek 0.0 to 0.85	Mouth to Little Meadow Creek	River/Stream	497983	0.85 MILES	2004 2	Green River	Green	0.00	0.85	37.28312	-85.45017	37.27887	-85.44438	2020
KY-1266	KY497981_01	Rename			Meadow Creek 0.0 to 7.4	Mouth to Phoebes Fork	River/Stream	497981	7.40 MILES	2000 5	Upper Cumberland River	Whitley	0.00	7.40	36.75316	-83.99898	36.79908	-84.03974	2020
KY-2290	KY513890_01	Rename			Meadow Creek 0.4 to 3.8	UT to Poletown Fork and Spencer Fork	River/Stream	513890	3.40 MILES	2004 5	Kentucky River	Owsley	0.40	3.80	37.47885	-83.66305	37.48238	-83.61495	2020
KY-1268	KY497983_02	Rename			Meadow Creek 0.85 to 7.4	Little Meadow Creek to UT	River/Stream	497983	6.55 MILES	2004 2	Green River	Green, Taylor	0.85	7.40	37.27887	-85.44438	37.29954	-85.37147	2020
KY-1269	KY497987_01	Rename			Meadow Fork 0.0 to 1.8	Mouth to Headwaters	River/Stream	497987	1.80 MILES	2002 2	Upper Cumberland River	Letcher	0.00	1.80	37.05288	-82.79382	37.05388	-82.76634	2020
KY-1270	KY498010_01	Rename			Meathouse Fork 0.0 to 2.95	Johns Creek to Rockhouse Fork	River/Stream	498010	2.95 MILES	2010 5	Big Sandy River	Pike	0.00	2.95	37.53271	-82.36779	37.53878	-82.32346	2020
KY-1271	KY498030_01	Rename			Meeting Creek 5.25 to 14.0	Little Meeting Creek to Petty Branch	River/Stream	498030	8.75 MILES	2008 5	Green River	Grayson, Hardin	5.25	14.00	37.58021	-86.22664	37.56328	-86.15925	2020
KY-1272	KY498047_01	Rename			Mellins Branch 0.0 to 1.5	mouth to UT and Forested Land	River/Stream	498047	1.50 MILES	2006 5	Ohio River	Carroll	0.00	1.50	38.63652	-85.22326	38.62765	-85.20365	2020
KY-1273	KY498082_01	Rename			Meshack Creek 0.0 to 2.8	Mouth to Pitcock Creek	River/Stream	498082	2.80 MILES	2000 2	Upper Cumberland River	Monroe	0.00	2.80	36.70159	-85.53543	36.73160	-85.54153	2020
KY-1274	KY498089_00	Rename			Metropolis Lake	Entire Lake	Lake/Reservoir	498089	37 ACRES	2020 5	Ohio River	McCracken			37.14480	-88.76092	37.15089	-88.77077	2020
KY-1275	KY498099_01	Rename			Middle Branch North Fork Little River 1.25 to 3.85	Lake Tandy to Headwaters	River/Stream	498099	2.60 MILES	2006 5	Lower Cumberland River	Christian	1.25	3.85	36.90808	-87.43167	36.92228	-87.39379	2020
KY-1276	KY498106_01	Rename			Middle Creek 0.0 to 7.7	Ohio River Backwaters to UT (change in land use)	River/Stream	498106	7.70 MILES	2010 5	Ohio River	Boone	0.00	7.70	38.96109	-84.83089	39.00194	-84.75902	2020
KY-1277	KY498108_01	Rename			Middle Creek Levisa Fork 0.0 to 4.6	Mouth to Bob Fitzpatrick Branch	River/Stream	498108	4.60 MILES	2016 5	Big Sandy River	Floyd	0.00	4.60	37.67203	-82.77906	37.65640	-82.83073	2020
KY-1278	KY498108_02	Rename			Middle Creek Levisa Fork 4.6 to 6.5	Bob Fitzpatrick Branch to Point of Discharge	River/Stream	498108	1.90 MILES	2010 3	Big Sandy River	Floyd	4.60	6.50	37.65640	-82.83064	37.64258	-82.84849	2020
KY-2291	KY513923_01	Rename			Middle Fork 0.0 to 2.2	Mouth to Cane Branch	River/Stream	513923	2.20 MILES	2008 5	Upper Cumberland River	McCreary	0.00	2.20	36.89500	-84.44078	36.87635	-84.46035	2020
KY-1279	KY498112_01	Rename			Middle Fork Beargrass Creek 0.0 to 2.0	Mouth to I-64 (US 60)	River/Stream	498112	2.00 MILES	2002 5	Ohio River	Jefferson	0.00	2.00	38.25250	-85.72721	38.24509	-85.69852	2020
KY-1280	KY498112_02	Rename			Middle Fork Beargrass Creek 2.0 to 2.9	I-64 (US 60) to UT	River/Stream	498112	0.90 MILES	2010 4A	Ohio River	Jefferson	2.00	2.90	38.24509	-85.69852	38.23874	-85.69462	2020
KY-1281	KY498112_03	Rename			Middle Fork Beargrass Creek 2.9 to 15.4	UT to Headwaters	River/Stream	498112	12.50 MILES	2010 4A	Ohio River	Jefferson	2.90	15.40	38.23874	-85.69462	38.25496	-85.52857	2020
KY-1282	KY498115_01	Rename			Middle Fork Clarks River 0.0 to 2.75	Mouth to Farley Branch	River/Stream	498115	2.75 MILES	2012 2	Tennessee River	Calloway	0.00	2.75	36.58875	-88.30305	36.57361	-88.33706	2020
KY-1283	KY498115_02	Rename			Middle Fork Clarks River 2.75 to 4.9	Farley Branch to UT	River/Stream	498115	2.15 MILES	2008 5	Tennessee River	Calloway	2.75	4.90	36.57361	-88.33706	36.57416	-88.36903	2020
KY-1284	KY498115_03	Rename			Middle Fork Clarks River 6.3 to 9.3	Jackson Creek to UT	River/Stream	498115	3.00 MILES	2012 4A	Tennessee River	Calloway	6.30	9.30	36.57769	-88.38677	36.56220	-88.42022	2020
KY-1285	KY498115_04	Rename			Middle Fork Clarks River 9.3 to 15.05	UT to Headwaters	River/Stream	498115	5.75 MILES	2012 5	Tennessee River	Calloway	9.30	15.05	36.56220	-88.42022	36.50411	-88.43027	2020
KY-1286	KY498115-1.7_01	Rename			Middle Fork Clarks River UT 0.0 to 1.3	Mouth to Headwaters	River/Stream	498115	1.30 MILES	2012 5	Tennessee River	Calloway	0.00	1.30	36.57704	-88.32461	36.56421	-88.33174	2020
KY-1287	KY498117_01	Rename			Middle Fork Creek 0.2 to 6.8	Burkholder Deadening to Dam of Lake	River/Stream	498117	6.60 MILES	2012 5	Tennessee River	Marshall	0.20	6.80	36.90094	-88.40527	36.84876	-88.43483	2020
KY-1288	KY498119_01	Rename			Middle Fork Drakes Creek 0.0 to 7.85	Mouth to Hams Branch	River/Stream	498119	7.85 MILES	2008 5	Green River	Allen, Warren	0.00	7.85	36.83872	-86.41301	36.77275	-86.38076	2020
KY-1289	KY498119_02	Rename			Middle Fork Drakes Creek 11.9 to 18.35	Sulphur Fork Creek to 4th UT Downstream from Dutch Branch	River/Stream	498119	6.45 MILES	2008 2	Green River	Allen	11.90	18.35	36.74780	-86.40979	36.69331	-86.34811	2020
KY-1290	KY498122_01	Rename			Middle Fork Grassy Creek 0.0 to 8.6	Mouth to North Fork Middle Fork Grassy Creek Confluence	River/Stream	498122	8.60 MILES	2012 2	Licking River	Pendleton	0.00	8.60	38.79300	-84.42967	38.74351	-84.49866	2020
KY-2710					Middle Fork Kentucky River 0.0 to 6.45	Mouth to Bear Creek	River/Stream	513931	6.45 MILES	2020 3	Kentucky River	Lee	0.00	6.45	37.58651	-83.67023	37.58055	-83.59971	2020
KY-2405	KY513931_02	Rename			Middle Fork Kentucky River 37.0 to 43.9	Freeman Fork to Dam	River/Stream	513931	6.90 MILES	2006 2	Kentucky River	Breathitt, Perry	37.00	43.90	37.38760	-83.47734	37.33991	-83.47025	2020
KY-2404	KY513931_01	Rename			Middle Fork Kentucky River 6.45 to 12.65	Bear Creek to Lower Twin Creek	River/Stream	513931	6.20 MILES	2016 5	Kentucky River	Lee	6.45	12.65	37.58052	-83.59987	37.54677	-83.56332	2020
KY-2406	KY513931_03	Rename			Middle Fork Kentucky River 64.05 to 65.3	Buckhorn Lake to Hell for Certain Creek	River/Stream	513931	1.25 MILES	2020 4A	Kentucky River	Leslie	64.05	65.30	37.25961	-83.37845	37.24611	-83.38192	2020
KY-2407	KY513931_04	Rename			Middle Fork Kentucky River 67.8 to 74.5	Bull Creek to Rockhouse Creek	River/Stream	513931	6.70 MILES	2016 5	Kentucky River	Leslie	67.80	74.50	37.22046	-83.37595	37.16307	-83.37224	2020
KY-2702					Middle Fork Kentucky River 75.1 to 76.45	Hurts Creek to Hyden-Leslie Co. Water District Dam	River/Stream	513931	1.35 MILES	2020 3	Kentucky River	Leslie	75.10	76.45	37.15444	-83.37053	37.14162	-83.37961	2020
KY-2408	KY513931_05	Rename			Middle Fork Kentucky River 76.45 to 77.6	Hyden-Leslie County Water District dam to Muncy Creek	River/Stream	513931	1.15 MILES	2016 2	Kentucky River	Leslie	76.45	77.60	37.14168	-83.37974	37.13172	-83.37323	2020
KY-2409	KY513931_06	Rename			Middle Fork Kentucky River 77.6 to 85.4	Muncy Creek to Greasy Creek	River/Stream	513931	7.80 MILES	2016 2	Kentucky River	Leslie	77.60	85.40	37.13170	-83.37324	37.07658	-83.39234	2020
KY-1291	KY498128_01	Rename			Middle Fork Licking River 0.0 to 2.7	Mouth to Right and Left Forks	River/Stream	498128	2.70 MILES	2020 4A	Licking River	Magoffin	0.00	2.70	37.75376	-83.11998	37.72944	-83.13411	2020
KY-2770		Split	KY-1292	KY498129_01	Middle Fork Little Sandy River 0.0 to 3.55	Mouth to Sheepskin Branch	River/Stream	498129	3.55 MILES	2008 2	Little Sandy River	Elliott	0.00	3.55	38.12143	-83.09271	38.09139	-83.09075	2020
KY-2771		Split	KY-1292	KY498129_01	Middle Fork Little Sandy River 3.55 to 6.0	Sheepskin Branch to Confluence with Brier Fork	River/Stream	498129	2.45 MILES	2020 2	Little Sandy River	Elliott	3.55	6.00	38.09139	-83.09075	38.06668	-83.09174	2020
KY-1293	KY498129_02	Rename			Middle Fork Little Sandy River 6.0 to 7.75	Brier Fork to Right and Left Forks	River/Stream	498129	1.75 MILES	2004 5	Little Sandy River	Elliott	6.00	7.75	38.06668	-83.09174	38.05173	-83.10034	2020
KY-2773		Split	KY-1294	KY498130_01	Middle Fork Massac Creek 0.0 to 3.1	Mouth to CR-1207 Hines Road	River/Stream	498130	3.10 MILES	2020 5	Ohio River	McCracken	0.00	3.10	37.05473	-88.72154	37.01626	-88.74480	2020
KY-2772		Split	KY-1294	KY498130_01	Middle Fork Massac Creek 3.1 to 6.4	CR-1207 Hines Road to Pond	River/Stream	498130	3.30 MILES	2020 5	Ohio River	McCracken	3.10	6.40	37.01626	-88.74480	36.97538	-88.72982	2020
KY-1295	KY498130-3.7_01	Rename			Middle Fork Massac Creek UT 0.0 to 3.1	Mouth to Headwaters	River/Stream	498130	3.10 MILES	2012 5	Ohio River	McCracken	0.00	3.10	37.00806	-88.78568	37.00650	-88.79746	2020
KY-1296	KY498131_01	Rename			Middle Fork Otter Creek 0.0 to 4.2	Mouth to UT	River/Stream	498131	4.20 MILES	2002 2	Salt River	Larue	0.00	4.20	37.49520	-85.57644	37.47124	-85.53605	2020
KY-1297	KY498133_01	Rename			Middle Fork Quicksand Creek 0.0 to 10.35	Mouth to Big Fire Coal Branch	River/Stream	498133	10.35 MILES	2016 5	Kentucky River	Knott	0.00	10.35	37.49825	-83.09293	37.48990	-82.97148	2020
KY-2809					Middle Fork Red River 1.7 to 5.8	South Fork Red River to Clear Branch	River/Stream	513934	4.10 MILES	2020 3	Kentucky River	Powell	1.70	5.80	37.82360	-83.75245	37.79786	-83.70529	2020
KY-2412	KY513934_03	Rename			Middle Fork Red River 10.7 to 15.5	0.7 River Miles Downstream of Sinking Fork to Headwaters	River/Stream	513934	4.80 MILES	2020 2	Kentucky River	Wolfe	10.70	15.50	37.75452	-83.66588	37.70609	-83.68432	2020
KY-2410	KY513934_01	Rename			Middle Fork Red River 5.8 to 7.3	Clear Branch to Lower Hood Branch (Natural Bridge SRP WWTP)	River/Stream	513934	1.50 MILES	2020 2	Kentucky River	Powell	5.80	7.30	37.79786	-83.70529	37.78331	-83.69195	2020
KY-2850					Middle Fork Red River 7.3 to 8.5	Lower Hood Branch (Natural Bridge SRP WWTP) to Natural Bridge Park Lake dam	River/Stream	513934	1.20 MILES	2020 3	Kentucky River	Powell	7.30	8.50	37.78331	-83.69195	37.77769	-83.67745	2020
KY-2899		Split	KY-2411	KY513934_02	Middle Fork Red River 8.85 to 10.7	Natural Bridge Park Lake backwaters to 0.7 River Miles Downstream of Sinking Fork	River/Stream	513934	1.85 MILES	2020 2	Kentucky River	Wolfe, Powell	8.85	10.70	37.77450	-83.67688	37.75452	-83.66588	2020
KY-1298	KY498135_01	Rename			Middle Fork Richland Creek 0.0 to 1.4	Mouth to Poplar Branch	River/Stream	498135	1.40 MILES	2000 5	Upper Cumberland River	Knox	0.00	1.40	36.91175	-83.90438	36.91195	-83.92352	2020
KY-2413	KY513936_01	Rename			Middle Fork Right Fork Cane Creek 0.0 to 2.8	Mouth to Headwaters	River/Stream	513936	2.80 MILES	2010 4A	Kentucky River	Powell	0.00	2.80	37.88034	-83.75854	37.91316	-83.77215	2020
KY-1299	KY498137_01	Rename			Middle Fork Rockcastle Creek 0.0 to 16.8	Mouth to Headwater	River/Stream	498137	16.80 MILES	2008 5	Big Sandy River	Martin	0.00	16.80	36.86739	-82.54178	37.71541	-82.61566	2020
KY-2414	KY513937_01	Rename			Middle Fork Rockcastle River 0.0 to 7.9	Mouth to Laurel Fork and Indian Creek	River/Stream	513937	7.90 MILES	2020 2	Upper Cumberland River	Jackson	0.00	7.90	37.33577	-84.11905	37.36741	-84.04836	2020
KY-1300	KY498146_01	Rename			Middle Pitman Creek 0.0 to 7.8	Mouth to Flat Run	River/Stream	498146	7.80 MILES	2008 4A	Green River	Green, Taylor	0.00	7.80	37.33377	-85.48742	37.37007	-85.40300	2020
KY-1301	KY498146_02	Rename			Middle Pitman Creek 8.3 to 10.2	UT at MP 8.2 to End of Forested Riparian Zone	River/Stream	498146	1.90 MILES	2008 4A	Green River	Taylor	8.30	10.20	37.37337	-85.39755	37.38091	-85.37240	2020
KY-1302	KY498146-6.9_01	Rename			Middle Pitman Creek UT 0.0 to 0.6	Mouth to 0.1 miles below SR 883	River/Stream	498146	0.60 MILES	2004 2	Green River	Taylor	0.00	0.60	37.36152	-85.40464	37.36091	-85.39427	2020
KY-2415	KY513956_01	Rename			Mike Branch 0.0 to 0.7	Mouth to Headwaters	River/Stream	513956	0.70 MILES	2020 2	Kentucky River	Owsley	0.00	0.70	37.33883	-83.56335	37.33540	-83.55161	2020
KY-2679	KY90001825_00	Rename			Mill Bluff Spring	Entire Springshed of Mill Bluff Spring	Spring	90001825	25939 ACRES	2020 3	Lower Cumberland River	Caldwell, Lyon			37.19005	-88.07285	37.13698	-87.89531	2020
KY-1303	KY498193_01	Rename			Mill Branch 0.0 to 2.2	Mouth to Headwaters	River/Stream	498193	2.20 MILES	2008 2	Upper Cumberland River	Knox	0.00	2.20	36.87342	-83.73238	36.86641	-83.70254	2020
KY-114	KY485693_01	Rename			Mill Creek 0.0 to 2.65	Mouth to Bull Tail Creek	River/Stream	485693	2.65 MILES	2004 2	Green River	Taylor	0.00	2.65	37.39797	-85.46400	37.42840	-85.48044	2020
KY-1309	KY498261_01	Rename			Mill Creek 0.0 to 2.7	Mouth to Cane Run	River/Stream	498261	2.70 MILES	2006 2	Salt River	Nelson	0.00	2.70	37.76444	-85.44049	37.78749	-85.41470	2020
KY-2417	KY513987_01	Rename			Mill Creek 0.0 to 2.8	Mouth to Blue Bank Creek	River/Stream	513987	2.80 MILES	2000 2	Licking River	Bath	0.00	2.80	38.11219	-83.74664	38.09408	-83.72932	2020
KY-1312	KY498263_01	Rename			Mill Creek 0.0 to 21.8	Mouth to Headwaters	River/Stream	498263	21.80 MILES	2020 5	Licking River	Harrison	0.00	21.80	38.46604	-84.33856	38.30188	-84.43127	2020
KY-1304	KY498233_01	Rename			Mill Creek 0.0 to 3.4	Mouth to Pond	River/Stream	498233	3.40 MILES	2002 2	Upper Cumberland River	Bell	0.00	3.40	36.79627	-83.57591	36.83826	-83.57325	2020
KY-1307	KY498258_01	Rename			Mill Creek 0.0 to 3.55	Mouth to Headwaters	River/Stream	498258	3.55 MILES	2004 5	Kentucky River	Letcher	0.00	3.55	37.23851	-82.77511	37.26942	-82.73381	2020
KY-1308	KY498260_01	Rename			Mill Creek 0.0 to 4.2	Mouth to Headwaters	River/Stream	498260	4.20 MILES	2004 4A	Green River	Ohio	0.00	4.20	37.60294	-86.75276	37.65518	-86.75824	2020
KY-1316	KY498266_01	Rename			Mill Creek 0.0 to 5.85	Mouth to East Fork of Mill Creek	River/Stream	498266	5.85 MILES	2000 2	Kentucky River	Carroll	0.00	5.85	38.62814	-85.10825	38.60443	-85.16790	2020
KY-1314	KY498265_01	Rename			Mill Creek 0.0 to 6.45	Mouth to UT	River/Stream	498265	6.45 MILES	2006 2	Licking River	Mason	0.00	6.45	38.55197	-83.78169	38.49749	-83.76339	2020
KY-1317	KY498268_01	Rename			Mill Creek 0.0 to 9.8	Mouth to Below Cutoff	River/Stream	498268	9.80 MILES	2020 5	Ohio River	Jefferson	0.00	9.80	38.06577	-85.91323	38.16665	-85.86180	2020
KY-1313	KY498264_01	Rename			Mill Creek 0.5 to 8.3	Kentucky River Backwaters to Headwaters	River/Stream	498264	7.80 MILES	2006 2	Kentucky River	Owen	0.50	8.30	38.54565	-84.99933	38.51888	-84.89649	2020
KY-2416	KY513983_01	Rename			Mill Creek 0.85 to 5.7	Cumberland River Backwaters to Headwaters	River/Stream	513983	4.85 MILES	2002 2	Upper Cumberland River	McCreary	0.85	5.70	36.92980	-84.35567	36.89050	-84.40532	2020
KY-1311	KY498262_03	Rename			Mill Creek 12.4 to 24.8	UT to Headwaters	River/Stream	498262	12.40 MILES	2002 2	Salt River	Hardin	12.40	24.80	37.86605	-85.92562	37.75325	-85.84430	2020
KY-1310	KY498262_02	Rename			Mill Creek 7.6 to 12.4	Fort Knox UT to UT	River/Stream	498262	4.80 MILES	2002 2	Salt River	Hardin	7.60	12.40	37.89456	-85.91689	37.86605	-85.92562	2020
KY-1318	KY498269_01	Rename			Mill Creek Branch 0.0 to 0.7	Mouth to Mile Point 0.7	River/Stream	498269	0.70 MILES	2002 5	Salt River	Hardin	0.00	0.70	37.77173	-85.88219	37.76454	-85.88848	2020
KY-1319	KY498275_01	Rename			Mill Creek Cutoff 0.0 to 2.3	Mouth to Pump Station	River/Stream	498275	2.30 MILES	2020 5	Ohio River	Jefferson	0.00	2.30	38.18752	-85.89184	38.17222	-85.85432	2020
KY-1306	KY498255_00	Rename			Mill Creek Lake	Dam to Upper lake	Lake/Reservoir	88	96 ACRES	2020 2	Green River	Monroe			36.68243	-85.70193	36.66937	-85.68443	2020
KY-2418	KY513989_00	Rename			Mill Creek Lake	Dam to Lake Boundaries	Lake/Reservoir	513989	30 ACRES	2016 2	Kentucky River	Powell			37.76752	-83.67360	37.76605	-83.66256	2020
KY-1305	KY498248-1.95_01	Rename			Mill Creek UT 0.0 to 1.7	Mouth to Headwaters	River/Stream	498248	1.70 MILES	2012 5	Salt River	Washington		1.70	37.65332	-85.18649	37.66122	-85.20978	2020
KY-1315	KY498265-7.0_01	Rename			Mill Creek UT 0.0 to 4.0	Mouth to Headwaters	River/Stream	498265	4.00 MILES	2004 5	Licking River	Fleming, Mason	0.00	4.00	38.49445	-83.75631	38.46197	-83.74119	2020
KY-2676	KY90001193_00	Rename			Mill Spring (Millerstown)	Springshed of Mill Spring (Mill Spring Southern evaluated, disconnected from Mill Spring Northern)	Spring	90001193	1536 ACRES	2020 5	Green River	Grayson			37.38344	-86.07515	37.38939	-86.11359	2020
KY-1320	KY498337_01	Rename			Miller Creek 0.0 to 6.5	Mouth to Headwaters	River/Stream	498337	6.50 MILES	2004 5	Big Sandy River	Johnson	0.00	6.50	37.77380	-82.79090	37.78170	-82.69280	2020
KY-2419	KY514012_01	Rename			Millers Creek 0.0 to 6.4	Mouth to Billey Fork	River/Stream	514012	6.40 MILES	2000 2	Kentucky River	Estill	0.00	6.40	37.66441	-83.88714	37.66198	-83.82926	2020
KY-1321	KY498379_01	Rename			Millseat Branch 0.0 to 2.1	Mouth to Headwaters	River/Stream	498379	2.10 MILES	2006 2	Kentucky River	Breathitt	0.00	2.10	37.47440	-83.14367	37.49999	-83.14028	2020
KY-2420	KY514025_01	Rename			Minor Creek 0.0 to 2.95	Mouth to Upstream Termini of CAH	River/Stream	514025	2.95 MILES	2006 2	Licking River	Rowan, Morgan	0.00	2.95	38.08558	-83.32776	38.10160	-83.29350	2020
KY-2421	KY514025_02	Rename			Minor Creek 2.95 to 7.4	Upstream Termini of CAH to Headwaters	River/Stream	514025	4.45 MILES	2006 2	Licking River	Morgan, Rowan	2.95	7.40	38.10160	-83.29350	38.15414	-83.27437	2020
KY-16	KY1629903_01	Rename			Mississippi River 891.1 to 953.5	KY/TN/MO State Line to Ohio River	River/Stream	1629903	62.40 MILES	2008 2	Mississippi River	Hickman, Fulton, Carlisle	891.10	953.50	36.49808	-89.53937	36.82487	-89.14140	2020
KY-2422	KY514033_01	Rename			Mitchell Creek 0.0 to 3.85	Mouth to Headwaters	River/Stream	514033	3.85 MILES	2016 5	Upper Cumberland River	Laurel	0.00	3.85	37.12152	-84.13361	37.12957	-84.09866	2020
KY-1322	KY498468_01	Rename			Mocks Branch 2.1 to 7.0	Herrington Lake Backwaters to UT near US-127	River/Stream	498468	4.90 MILES	2020 5	Kentucky River	Boyle	2.10	7.00	37.69064	-84.76357	37.70549	-84.80644	2020
KY-1323	KY498470_00	Rename			Moffit Lake	Entire Reservoir	Lake/Reservoir	498470	48 ACRES	2020 2	Tradewater River	Union			37.57889	-87.85470	37.57854	-87.84616	2020
KY-1324	KY498486_01	Rename			Monks Creek 0.0 to 1.6	Mouth to Forested Area	River/Stream	498486	1.60 MILES	2006 2	Salt River	Nelson	0.00	1.60	37.63864	-85.52373	37.65835	-85.52014	2020
KY-1325	KY498509_01	Rename			Montgomery Creek 0.0 to 11.1	Mouth to Headwaters	River/Stream	498509	11.10 MILES	2012 5	Lower Cumberland River	Christian	0.00	11.10	36.70963	-87.32987	36.82106	-87.31229	2020
KY-1327	KY498512_01	Rename			Montgomery Creek 0.0 to 6.8	Mouth to Headwaters	River/Stream	498512	6.80 MILES	2006 5	Ohio River	Lewis	0.00	6.80	38.60866	-83.16309	38.53762	-83.12426	2020
KY-1326	KY498510_01	Rename			Montgomery Creek 0.0 to 7.3	Mouth to Eison Branch	River/Stream	498510	7.30 MILES	2014 5	Tradewater River	Caldwell	0.00	7.30	37.16101	-87.70233	37.10354	-87.75290	2020
KY-1328	KY498528_01	Rename			Moore Branch 0.0 to 0.65	Mouth to Discharge (Britthaven and Fairview Apt WWTP)	River/Stream	498528	0.65 MILES	2008 3	Upper Cumberland River	Bell	0.00	0.65	36.69684	-83.68446	36.69943	-83.69326	2020
KY-1329	KY498551_01	Rename			Moore Creek 0.0 to 4.4	Mouth to Headwaters	River/Stream	498551	4.40 MILES	2002 2	Upper Cumberland River	Knox	0.00	4.40	36.85648	-83.75574	36.82484	-83.71709	2020
KY-2423	KY514059_01	Rename			Morgan Fork 0.0 to 0.5	Mouth to Dry Creek	River/Stream	514059	0.50 MILES	2016 4A	Licking River	Rowan	0.00	0.50	38.16652	-83.43719	38.16381	-83.42953	2020
KY-2424	KY514059_02	Rename			Morgan Fork 0.5 to 2.8	Dry Creek to 0.027 miles above UT/Log Yard	River/Stream	514059	2.30 MILES	2016 4A	Licking River	Rowan	0.50	2.80	38.16381	-83.42953	38.13642	-83.42035	2020
KY-1331	KY498657_01	Rename			Moseby Branch 0.0 to 2.2	Mouth to Mile Point 2.2	River/Stream	498657	2.20 MILES	2000 5	Kentucky River	Owen	0.00	2.20	38.69282	-84.87094	38.67817	-84.85660	2020
KY-3241					Mother Nature Spring	Entire springshed of Mother Nature Spring	Spring	90001101	52 ACRES	2020 3	Big Sandy River	Pike			37.25530	-82.46086	37.25039	-82.46288	2020
KY-1332	KY498686_01	Rename			Motts Lick Creek 0.0 to 3.3	Mouth to Patterson Creek	River/Stream	498686	3.30 MILES	2004 2	Green River	Logan	0.00	3.30	36.95962	-86.87428	36.95258	-86.83983	2020
KY-2840		Split	KY-1333	KY498977_01	Mud Camp Creek 0.0 to 1.2	Mouth to Collins Branch	River/Stream	498977	1.20 MILES	2008 2	Upper Cumberland River	Monroe, Cumberland	0.00	1.20	36.76402	-85.51184	36.77858	-85.51607	2020
KY-2842		Split	KY-1333	KY498977_01	Mud Camp Creek 1.2 to 3.8	Collins Branch to Unnamed Tributary (at Milepost 0.25 of CR-1335 Sawmill Hollow Road)	River/Stream	498977	2.60 MILES	2020 2	Upper Cumberland River	Cumberland	1.20	3.80	36.77858	-85.51607	36.78321	-85.55642	2020
KY-2841		Split	KY-1333	KY498977_01	Mud Camp Creek 3.8 to 8.8	Unnamed Tributary (at Milepost 0.25 of CR-1335 Sawmill Hollow Road) to Headwaters	River/Stream	498977	5.00 MILES	2020 2	Upper Cumberland River	Monroe, Cumberland	3.80	8.80	36.78321	-85.55642	36.79805	-85.62860	2020
KY-1336	KY498983_01	Rename			Mud Creek 0.0 to 2.7	Mouth to Toler Creek	River/Stream	498983	2.70 MILES	2004 5	Big Sandy River	Floyd	0.00	2.70	37.54058	-82.63087	37.52504	-82.64676	2020
KY-1338	KY498984_01	Rename			Mud Creek 0.0 to 4.35	Mouth to Headwaters	River/Stream	498984	4.35 MILES	2014 4A	Salt River	Bullitt, Jefferson	0.00	4.35	38.13457	-85.70688	38.08277	-85.68221	2020
KY-2425	KY514128_01	Rename			Mud Creek 0.0 to 5.3	Mouth to UT	River/Stream	514128	5.30 MILES	2000 5	Upper Cumberland River	Whitley	0.00	5.30	36.59623	-84.10320	36.60155	-84.04993	2020
KY-1334	KY498982_01	Rename			Mud Creek 0.0 to 5.9	Mouth to UT	River/Stream	498982	5.90 MILES	1998 5	Mississippi River	Fulton	0.00	5.90	36.58981	-89.11810	36.54766	-89.09064	2020
KY-1337	KY498983-1.8_01	Rename			Mud Creek UT 0.0 to 0.3	Mouth to Point of Discharge	River/Stream	498983	0.30 MILES	2010 3	Big Sandy River	Floyd	0.00	0.30	37.53297	-82.64173	37.53002	-82.63837	2020
KY-1335	KY498982-4.2_01	Rename			Mud Creek UT 0.0 to 2.2	Mouth to Headwaters	River/Stream	498982	2.20 MILES	2006 5	Mississippi River	Fulton	0.00	2.20	36.56535	-89.10659	36.53531	-89.12009	2020
KY-1339	KY498997_01	Rename			Mud Lick 0.0 to 2.3	Mouth to Headwaters (Basin)	River/Stream	498997	2.30 MILES	2002 2	Upper Cumberland River	Knox	0.00	2.30	36.86077	-83.75270	36.89077	-83.75987	2020
KY-1340	KY499009_01	Rename			Mud Lick Creek 0.2 to 6.15	Backwaters to McCoys Fork	River/Stream	499009	5.95 MILES	2020 2	Ohio River	Boone	0.20	6.15	38.86161	-84.76031	38.86059	-84.67823	2020

KY-3214					Mud Lick Creek 5.6 to 9.0	UT with Chalybeate Branch to Land Use Change	River/Stream	516711	3.40	MILES	2020	5	Licking River	Bath	5.60	9.00	38.07292	-83.65989	38.04928	-83.68904	2020
KY-1341	KY499011_01	Rename			Mud River 0.0 to 9.1	Mouth to Rocky Creek	River/Stream	499011	9.10	MILES	2014	5	Green River	Butler, Muhlenberg	0.00	9.10	37.21228	-86.89903	37.15477	-86.92630	2020
KY-1343	KY499011_03	Rename			Mud River 30.9 to 52.2	Wolf Lick Creek to Motts Lick Creek	River/Stream	499011	21.30	MILES	2008	5	Green River	Logan	30.90	52.20	37.06272	-86.94333	36.95986	-86.87435	2020
KY-1344	KY499011_04	Rename			Mud River 52.2 to 63.9	Motts Lick Creek to Town Branch Creek	River/Stream	499011	11.70	MILES	2004	5	Green River	Logan	52.20	63.90	36.95962	-86.87428	36.88306	-86.86780	2020
KY-1342	KY499011_02	Rename			Mud River 9.1 to 30.9	Rocky Creek to Wolf Lick Creek	River/Stream	499011	21.80	MILES	2020	5	Green River	Logan, Butler, Muhlenberg	9.10	30.90	37.15477	-86.92630	37.06272	-86.94333	2020
KY-2776		Split	KY-2426	KY514141_01	Muddy Creek 0.0 to 13.8	Mouth to 0.1 River Mile Upstream of KY-52 Irvine Road	River/Stream	514141	13.80	MILES	2020	4A	Kentucky River	Madison	0.00	13.80	37.86145	-84.16610	37.74037	-84.15687	2020
KY-1347	KY499037_01	Rename			Muddy Creek 0.0 to 5.0	Mouth to Headwaters	River/Stream	499037	5.00	MILES	2004	5	Green River	Ohio	0.00	5.00	37.50668	-86.67928	37.45866	-86.73029	2020
KY-1345	KY499036_01	Rename			Muddy Creek 0.1 to 5.9	Ohio River influence to Sandy Creek	River/Stream	499036	5.80	MILES	2020	5	Green River	Butler	0.10	5.90	37.22853	-86.77970	37.17697	-86.76422	2020
KY-1348	KY499038_01	Rename			Muddy Creek 1.8 to 4.9	North Fork of Muddy Creek to Three Lick Fork	River/Stream	499038	3.10	MILES	2004	5	Green River	Ohio	1.80	4.90	37.43368	-86.90633	37.42442	-86.85504	2020
KY-2775		Split	KY-1350	KY499038_03	Muddy Creek 13.0 to 15.5	Land Use Change (1.2 River Miles Upstream of CR-1125 Mt Pleasant Road) to Headwaters	River/Stream	499038	2.50	MILES	2002	2	Green River	Ohio	13.00	15.50	37.42276	-86.73440	37.44779	-86.72632	2020
KY-2777		Split	KY-2426	KY514141_01	Muddy Creek 13.8 to 20.75	0.1 River Mile Upstream of KY-52 Irvine Road to Viny Fork	River/Stream	514141	6.95	MILES	2000	4A	Kentucky River	Madison	13.80	20.75	37.74039	-84.15691	37.70998	-84.18205	2020
KY-2427	KY514141_02	Rename			Muddy Creek 20.75 to 31.55	Viny Fork to Headwaters	River/Stream	514141	10.80	MILES	2014	5	Kentucky River	Madison	20.75	31.55	37.70998	-84.18205	37.62039	-84.18634	2020
KY-1349	KY499038_02	Rename			Muddy Creek 5.8 to 9.0	Pigeon Creek to South Fork of Muddy Creek	River/Stream	499038	3.20	MILES	2008	5	Green River	Ohio	5.80	9.00	37.41653	-86.84187	37.41280	-86.79019	2020
KY-1346	KY499036_02	Rename			Muddy Creek 8.6 to 15.25	Grassy Lick Creek to Flatrock Branch	River/Stream	499036	6.65	MILES	2008	5	Green River	Butler	8.60	15.25	37.14119	-86.78180	37.05869	-86.79552	2020
KY-2774		Split	KY-1350	KY499038_03	Muddy Creek 9.0 to 13.0	South Fork of Muddy Creek to Land Use Change (1.2 River Miles Upstream of CR-1125 Mt Pleasant Road)	River/Stream	499038	4.00	MILES	2002	2	Green River	Ohio	9.00	13.00	37.41280	-86.79019	37.42276	-86.73440	2020
KY-2428	KY514141-21.3_01	Rename			Muddy Creek UT 0.0 to 2.8	Mouth to Headwaters	River/Stream	514141	2.80	MILES	2014	5	Kentucky River	Madison	0.00	2.80	37.71371	-84.18941	37.73709	-84.22157	2020
KY-1351	KY499041_01	Rename			Muddy Fork 0.0 to 4.65	Mouth to Headwaters	River/Stream	499041	4.65	MILES	2010	2	Green River	Muhlenberg	0.00	4.65	37.35719	-87.16366	37.33333	-87.23258	2020
KY-1352	KY499042_01	Rename			Muddy Fork 0.0 to 7.2	Beargrass Creek to Headwaters	River/Stream	499042	7.20	MILES	2002	4A	Ohio River	Jefferson	0.00	7.20	38.26510	-85.62506	38.26248	-85.71743	2020
KY-1354	KY499043_02	Rename			Muddy Fork Little River 13.2 to 25.2	Kenady Creek to Brushy Grove Creek	River/Stream	499043	12.00	MILES	2002	5	Lower Cumberland River	Trigg	13.20	25.20	36.94378	-87.80203	36.97254	-87.75041	2020
KY-1353	KY499043_01	Rename			Muddy Fork Little River 2.4 to 6.6	Lake Barkley Backwaters to Long Pond Branch	River/Stream	499043	4.20	MILES	2020	5	Lower Cumberland River	Trigg	2.40	6.60	36.89085	-87.86112	36.91936	-87.84169	2020
KY-1355	KY499043_03	Rename			Muddy Fork Little River 25.3 to 28.8	Brushy Creek to Horse Creek	River/Stream	499043	3.50	MILES	2012	5	Lower Cumberland River	Trigg	25.30	28.80	36.97254	-87.75041	36.95487	-87.73085	2020
KY-3215					Muddy Fork Little River 6.6 to 13.2	Long Pond Branch to Kenady Creek	River/Stream	499043	6.60	MILES	2020	4C	Lower Cumberland River	Trigg	6.60	13.20	36.76491	-85.67445	36.80989	-85.57117	2020
KY-3216					Muddygut Creek 0.0 to 4.15	Mouth to pond near headwaters	River/Stream	514143	4.15	MILES	2020	4C	Upper Cumberland River	Laurel	0.00	4.15	37.07645	-83.95010	37.12693	-83.93965	2020
KY-1357	KY499058_01	Rename			Mudlick Branch 0.0 to 0.2	Mouth to Near Discharge	River/Stream	499058	0.20	MILES	2010	3	Big Sandy River	Martin	0.00	0.20	37.79664	-82.57164	37.79440	-82.57313	2020
KY-1356	KY499056_01	Rename			Mudlick Branch 0.0 to 3.25	Mouth to Headwaters	River/Stream	499056	3.25	MILES	2016	5	Big Sandy River	Pike	0.00	3.25	37.60682	-82.22823	37.56659	-82.22683	2020
KY-1358	KY499058-0.65_01	Rename			Mudlick Branch UT 0.0 to 0.6	Mouth to Valley Fill	River/Stream	499058	0.60	MILES	2010	5	Big Sandy River	Martin	0.00	0.60	37.78870	-82.57540	37.78718	-82.56567	2020
KY-1359	KY499065_01	Rename			Mudlick Creek 3.7 to 4.2	Near Stonecoal Branch to Point of Discharge	River/Stream	499065	0.50	MILES	2010	3	Big Sandy River	Johnson	3.70	4.20	37.87000	-82.87438	37.87543	-82.87530	2020
KY-1360	KY499065_02	Rename			Mudlick Creek 7.80 to 8.75	UT at river mile 7.8 to Cantrell Branch	River/Stream	499065	0.95	MILES	2016	5	Big Sandy River	Johnson	7.80	8.75	37.91712	-82.89365	37.91988	-82.90932	2020
KY-2429	KY514159_01	Rename			Muncy Creek 2.85 to 5.15	Land Use Change to headwaters	River/Stream	514159	2.30	MILES	2004	5	Kentucky River	Leslie	2.85	5.15	37.10085	-83.38784	37.11319	-83.41857	2020
KY-3217					Murphy Creek UT 0.0 to 1.2	Mouth to Headwaters	River/Stream	499112	1.20	MILES	2020	4C	Salt River	Larue	0.00	1.20	37.68127	-85.63521	37.67004	-85.62778	2020
KY-3147					Murphy Creek UT 1.4 to 1.9	Confluence with tributary (where stream goes from first to second order) to pond	River/Stream	514167	0.50	MILES	2020	3	Upper Cumberland River	McCreary	1.40	1.90	36.60997	-84.43273	36.60706	-84.42458	2020
KY-2712					Murphy Pond	Entire Pond	Lake/Reservoir	499115	21	ACRES	2020	3	Mississippi River	Hickman			36.74007	-88.85490	36.74318	-88.85599	2020
KY-1361	KY499138_01	Rename			Musselman Creek 0.0 to 8.95	Mouth to Headwaters	River/Stream	499138	8.95	MILES	2006	2	Kentucky River	Grant	0.00	8.95	38.56864	-84.67744	38.53068	-84.57776	2020
KY-1362	KY499140_01	Rename			Mussin Branch 0.0 to 1.9	Mouth to Headwaters	River/Stream	499140	1.90	MILES	2006	4A	Salt River	Marion	0.00	1.90	37.48112	-85.31110	37.46585	-85.28657	2020
KY-1363	KY499173_01	Rename			Narge Creek 2.8 to 4.2	Wooded Buffer to Wooded Buffer	River/Stream	499173	1.40	MILES	2004	5	Green River	Hopkins	2.80	4.20	37.44842	-87.37730	37.43682	-87.39675	2020
KY-1364	KY499185_01	Rename			Nats Creek 0.0 to 3.2	Mouth to Evans Fork	River/Stream	499185	3.20	MILES	2004	5	Big Sandy River	Lawrence	0.00	3.20	37.94259	-82.64560	37.91754	-82.63334	2020
KY-1365	KY499204_01	Rename			Near Fork Sandsuck Creek 1.1 to 2.15	End of Forested Watershed to Headwaters	River/Stream	499204	1.05	MILES	2010	5	Little Sandy River	Greenup	1.10	2.15	38.45396	-82.81382	38.44056	-82.81283	2020
KY-2430	KY514209_01	Rename			Ned Branch 0.25 to 2.05	Backwater of Lake Cumberland to Headwaters	River/Stream	514209	1.80	MILES	2002	2	Upper Cumberland River	Laurel	0.25	2.05	36.96743	-84.34134	36.97257	-84.31464	2020
KY-3218					Neely Branch 0.0 to 4.9	Mouth to Headwaters	River/Stream	499226	4.90	MILES	2020	4C	Lower Cumberland River	Simpson	0.00	4.90	36.71944	-86.67000	36.67255	-86.63846	2020
KY-1366	KY499236_01	Rename			Negro Creek 0.8 to 2.9	Little Negro Creek to Tarkin Branch	River/Stream	499236	2.10	MILES	2010	2	Kentucky River	Rockcastle	0.80	2.90	37.39375	-84.41432	37.38931	-84.44592	2020
KY-1367	KY499417_01	Rename			Newberry Branch 0.0 to 2.8	Mouth to Headwaters	River/Stream	499417	2.80	MILES	2004	5	Ohio River	Greenup	0.00	2.80	38.74939	-82.91991	38.72457	-82.88956	2020
KY-1368	KY499428_01	Rename			Newcombe Creek 1.5 to 7.55	Embayment to Right Fork Newcombe and Lick Fork	River/Stream	499428	6.05	MILES	2016	5	Little Sandy River	Elliott	1.50	7.55	38.12129	-83.06019	38.06120	-83.05219	2020
KY-1369	KY499428-3.3_01	Rename			Newcombe Creek UT 0.0 to 0.95	Mouth to headwaters	River/Stream	499428	0.95	MILES	2004	2	Little Sandy River	Elliott	0.00	0.95	38.10259	-83.06189	38.10523	-83.07687	2020
KY-1370	KY499428-5.95_01	Rename			Newcombe Creek UT 0.0 to 1.15	Mouth to Headwaters	River/Stream	499428	1.15	MILES	2004	2	Little Sandy River	Elliott	0.00	1.15	38.07541	-83.05477	38.06986	-83.07171	2020
KY-1371	KY499457_01	Rename			Newtons Creek 0.0 to 8.7	Ohio River Backwater to UT	River/Stream	499457	8.70	MILES	2008	5	Ohio River	McCracken	0.00	8.70	37.20911	-88.88318	37.12820	-88.88220	2020
KY-1372	KY499467_01	Rename			Nichols Fork 0.0 to 2.0	Confluence with Green Branch to Headwaters	River/Stream	499467	2.00	MILES	2004	2	Little Sandy River	Elliott	0.00	2.00	38.07721	-82.99754	38.08322	-83.02713	2020
KY-1373	KY499491_01	Rename			No Creek 0.0 to 2.7	Mouth to loss of riparian vegetation	River/Stream	499491	2.70	MILES	2014	2	Green River	Ohio	0.00	2.70	37.48554	-87.00069	37.48757	-86.96795	2020
KY-1374	KY499508_01	Rename			Noland Creek 0.05 to 1.2	Near Mouth to UT	River/Stream	499508	1.15	MILES	2006	5	Kentucky River	Estill	0.05	1.20	37.79948	-84.07415	37.79692	-84.05714	2020
KY-1375	KY499511_00	Rename			Nolin Lake	Entire Reservoir	Lake/Reservoir	499511	6024	ACRES	2020	1	Green River	Edmonson, Grayson, Hart			37.27776	-86.24724	37.37311	-86.06038	2020
KY-1376	KY499512_01	Rename			Nolin River 0.0 to 7.7	Mouth to Nolin River Reservoir Dam	River/Stream	499512	7.70	MILES	2020	2	Green River	Edmonson	0.00	7.70	37.21520	-86.24927	37.27672	-86.24798	2020
KY-3126		Split	KY-1377	KY499512_02	Nolin River 52.95 to 78.65	Round Stone Creek to Hardin County Water District #2	River/Stream	499512	25.70	MILES	2020	2C	Green River	Grayson, Hardin, Hart	52.95	78.65	37.41399	-86.03992	37.56193	-86.03611	2020
KY-3127		Split	KY-1377	KY499512_02	Nolin River 78.65 to 79.65	Hardin County Water District #2 to 1 mile upstream	River/Stream	499512	1.00	MILES	2020	4A	Green River	Hardin	78.65	79.65	37.56193	-86.03611	37.55349	-86.02696	2020
KY-3128		Split	KY-1377	KY499512_02	Nolin River 79.65 to 91.6	1 mile upstream of Hardin County Water District #2 to Valley Creek	River/Stream	499512	11.95	MILES	2020	4A	Green River	Hardin	79.65	91.60	37.55349	-86.02696	37.59758	-85.95398	2020
KY-1378	KY499512_03	Rename			Nolin River 91.6 to 102.0	Valley Creek to Middle Creek	River/Stream	499512	10.40	MILES	2004	2	Green River	Hardin	91.60	102.00	37.59758	-85.95398	37.56871	-85.83867	2020
KY-2682	KY90002673_00	Rename			Nolynn Spring	Entire Springshed of Nolynn Spring	Spring	90002673	36086	ACRES	2020	3	Green River	Larue, Hardin			37.55897	-85.78797	37.50038	-85.61025	2020
KY-1379	KY499533_01	Rename			North Benson Creek 0.8 to 1.95	North Fork North Benson to White Oak Creek	River/Stream	499533	1.15	MILES	2000	5	Kentucky River	Franklin	0.80	1.95	38.21279	-84.97207	38.21602	-84.98977	2020
KY-1380	KY499536_01	Rename			North Branch Lulbegrud Creek 0.0 to 2.4	Mouth to Dry Branch	River/Stream	499536	2.40	MILES	2002	2	Kentucky River	Montgomery, Clark	0.00	2.40	37.96008	-83.98312	37.98906	-83.97683	2020
KY-1381	KY499536-2.6_01	Rename			North Branch Lulbegrud Creek UT 0.0 to 1.9	Mouth to Headwaters	River/Stream	499536	1.90	MILES	2006	5	Kentucky River	Montgomery	0.00	1.90	37.99135	-83.97648	38.01182	-83.95955	2020
KY-614	KY499538_01	Rename			North Branch South Fork Panther Creek 0.0 to 4.15	Mouth to Sugar Camp Branch	River/Stream	499538	4.15	MILES	2004	5	Green River	Ohio, Hancock	0.00	4.15	37.69156	-86.75994	37.73187	-86.71608	2020
KY-615	KY499540_01	Rename			North Elkhorn Creek 0.7 to 7.4	Land Use Change to State Road 1262 Bridge	River/Stream	499540	6.70	MILES	2004	2	Kentucky River	Franklin	0.70	7.40	38.22190	-84.79112	38.25319	-84.75299	2020
KY-1382	KY499540_02	Rename			North Elkhorn Creek 17.4 to 22.5	McConnell Run to Bluespring Branch	River/Stream	499540	5.10	MILES	2016	2	Kentucky River	Scott	17.40	22.50	38.23967	-84.69337	38.23118	-84.63910	2020
KY-1383	KY499540_03	Rename			North Elkhorn Creek 33.7 to 34.7	Intake to 1 mile default	River/Stream	499540	1.00	MILES	2006	2	Kentucky River	Scott	33.70	34.70	38.21932	-84.56282	38.22173	-84.55900	2020
KY-1384	KY499540_04	Rename			North Elkhorn Creek 44.75 to 65.95	Boyd Run to UT (flows from the Southeast)	River/Stream	499540	21.20	MILES	2016	2	Kentucky River	Scott, Fayette	44.75	65.95	38.21316	-84.48529	38.10621	-84.40375	2020
KY-1385	KY499540_05	Rename			North Elkhorn Creek 65.95 to 73.8	UT to UT	River/Stream	499540	7.85	MILES	2006	5	Kentucky River	Fayette	65.95	73.80	38.10621	-84.40373	38.02818	-84.40135	2020
KY-1387	KY499540-71.1_01	Rename			North Elkhorn Creek UT 0.0 to 3.5	North Elkhorn Creek to headwaters	River/Stream	499540	3.50	MILES	2010	4A	Kentucky River	Fayette	0.00	3.50	38.05482	-84.41495	38.01622	-84.42904	2020
KY-1386	KY499540-66_01	Rename			North Elkhorn Creek UT 0.0 to 5.6	Mouth to UT	River/Stream	499540	5.60	MILES	2004	5	Kentucky River	Fayette	0.00	5.60	38.10621	-84.40373	38.07263	-84.33774	2020
KY-1388	KY499541_01	Rename			North Fork Barnett Creek 0.0 to 2.3	Mouth to UT	River/Stream	499541	2.30	MILES	2010	5	Green River	Ohio	0.00	2.30	37.52926	-87.01572	37.56038	-87.00704	2020
KY-1389	KY499544_01	Rename			North Fork Canoe Creek 0.0 to 8.05	Mouth to Headwaters	River/Stream	499544	8.05	MILES	2014	5	Ohio River	Henderson	0.00	8.05	37.80929	-87.58409	37.84758	-87.49281	2020
KY-1391	KY499547_01	Rename			North Fork Currys Fork 0.0 to 6.0	Confluence with Currys Fork to Crystal Lake	River/Stream	499547	6.00	MILES	2014	5	Salt River	Oldham	0.00	6.00	38.35737	-85.44007	38.40019	-85.36691	2020
KY-1392	KY499547-4.7_01	Rename			North Fork Currys Fork UT 0.0 to 0.1	Mouth to point of Discharge of LaGrange WWTP	River/Stream	499547	0.10	MILES	2006	3	Salt River	Oldham	0.00	0.10	38.39202	-85.38701	38.39124	-85.38466	2020
KY-2431	KY514288_01	Rename			North Fork Dog Slaughter Creek 0.0 to 0.7	Mouth to Cow Creek and Gulf Branch	River/Stream	514288	0.70	MILES	2002	2	Upper Cumberland River	Whitley	0.00	0.70	36.85930	-84.30072	36.86629	-84.29532	2020
KY-2432	KY514290_01	Rename			North Fork Kentucky River 0.0 to 2.3	Mouth to Mile Point 2.3 (1 mile upstream of old intake)	River/Stream	514290	2.30	MILES	2016	4A	Kentucky River	Lee	0.00	2.30	37.57055	-83.71101	37.58263	-83.68108	2020
KY-2441	KY514290_09	Rename			North Fork Kentucky River 104.05 to 105.05	Hazard water withdrawal to 1 mile upstream	River/Stream	514290	1.00	MILES	2020	4A	Kentucky River	Perry	104.05	105.05	37.24655	-83.18176	37.24374	-83.18103	2020
KY-2442	KY514290_10	Rename			North Fork Kentucky River 105.05 to 110.8	1 mile upstream Hazard water withdrawal to Carr Fork	River/Stream	514290	5.75	MILES	2002	4A	Kentucky River	Perry	105.05	110.80	37.24374	-83.18103	37.20580	-83.13194	2020
KY-2443	KY514290_11	Rename			North Fork Kentucky River 110.8 to 124.9	near Carr Fork to near Line Fork	River/Stream	514290	14.10	MILES	2016	5	Kentucky River	Perry	110.80	124.90	37.20580	-83.13194	37.12869	-83.05343	2020
KY-2444	KY514290_11A	Rename			North Fork Kentucky River 124.9 to 131.0	Line Fork to point of Letcher County DWS withdrawal	River/Stream	514290	6.10	MILES	2010	4A	Kentucky River	Letcher	124.90	131.00	37.12887	-83.05379	37.13986	-82.98060	2020
KY-2445	KY514290_12	Rename			North Fork Kentucky River 131.0 to 132.0	Point of withdrawal to 1 mile upstream	River/Stream	514290	1.00	MILES	2010	4A	Kentucky River	Letcher	131.00	132.00	37.13986	-82.98060	37.13515	-82.97434	2020
KY-2292	KY514290_13	Rename			North Fork Kentucky River 132.0 to 145.4	0.4 mile Upstream of Rockhouse Fork to Cowan Creek	River/Stream	514290	13.40	MILES	2002	4A	Kentucky River	Letcher	132.00	145.40	37.13515	-82.97434	37.10544	-82.86336	2020
KY-2293	KY514290_14	Rename			North Fork Kentucky River 145.4 to 148.15	Cowan Creek to Whitesburg WWTP (new)	River/Stream	514290	2.75	MILES	2006	5	Kentucky River	Letcher	145.40	148.15	37.10544	-82.86336	37.12564	-82.84168	2020
KY-3003		Split	KY-2294	KY514290_15	North Fork Kentucky River 148.15 to 150.9	Whitesburg WWTP (new) to dam just below Whitesburg Municipal Water Works/Veolia Water	River/Stream	514290	2.75	MILES	2020	5	Kentucky River	Letcher	148.15	150.90	37.12564	-82.84168	37.11516	-82.81400	2020
KY-3005		Split	KY-2294	KY514290_15	North Fork Kentucky River 150.9 to 151.9	Dam just below Whitesburg Municipal Water Works/Veolia Water to 1 Mile Upstream of Intake	River/Stream	514290	1.00	MILES	2020	5	Kentucky River	Letcher	150.90	151.90	37.11516	-82.81400	37.11582	-82.80766	2020
KY-3004		Split	KY-2294	KY514290_15	North Fork Kentucky River 151.9 to 161.9	1 Mile Upstream of Whitesburg Municipal Water Works/Veolia Water to Boone Fork	River/Stream	514290	10.00	MILES	2020	5	Kentucky River	Letcher	151.90	161.90	37.11582	-82.80766	37.15681	-82.74040	2020
KY-3107		Split	KY-2433	KY514290_02	North Fork Kentucky River 2.3 to 3.35	1 Mile Upstream of Historic Intake to Beattyville Water Works	River/Stream	514290	1.05	MILES	2020	4A	Kentucky River	Lee	2.30	3.35	37.58263	-83.68108	37.57927	-83.66771	2020
KY-3108		Split	KY-2433	KY514290_02	North Fork Kentucky River 3.35 to 4.35	Beattyville Water Works to 1 mile upstream	River/Stream	514290	1.00	MILES	2020	4A	Kentucky River	Lee	3.35	4.35	37.57954	-83.66766	37.59321	-83.67237	2020
KY-2434	KY514290_03	Rename			North Fork Kentucky River 35.6 to 47.1	Frozen Creek to Jackson Municipal Water Works Point of Withdrawal	River/Stream	514290	11.50	MILES	2016	5	Kentucky River	Breathitt	35.60	47.10	37.60286	-83.42536	37.54566	-83.37003	2020
KY-3109		Split	KY-2433	KY514290_02	North Fork Kentucky River 4.35 to 35.7	1 Mile Upstream of Beattyville Water Works to Frozen Creek	River/Stream	514290	31.35	MILES	2020	4A	Kentucky River	Wolfe, Breathitt, Lee	4.35	35.70	37.59321	-83.67237	37.60286	-83.42536	2020
KY-2435	KY514290_04	Rename			North Fork Kentucky River 47.1 to 48.1	Jackson Municipal Water Works Point of Withdrawal to 1 mile upstream	River/Stream	514290	1.00	MILES	2016	4A	Kentucky River	Breathitt	47.10	48.10	37.54566	-83.37003	37.53203	-83.36446	2020
KY-2436	KY514290_05	Rename			North Fork Kentucky River 48.1 to 55.4	1 mile upstream Jackson Municipal Water Works Point of Withdrawal to Troublesome Creek	River/Stream	514290	7.30	MILES	2010	4A	Kentucky River	Breathitt	48.10	55.40	37.53203	-83.36446	37.48572	-83.34619	2020
KY-2437	KY514290_06	Rename			North Fork Kentucky River 55.4 to 77.05	Troublesome Creek to Grapevine Creek	River/Stream	514290	21.65	MILES	2016	5	Kentucky River	Perry, Breathitt	55.40	77.05	37.48586	-83.34617	37.35585	-83.35467	2020
KY-2438	KY514290_07	Rename			North Fork Kentucky River 77.05 to 89.7	Grapevine Creek to Big Willard Creek	River/Stream	514290	12.65	MILES	2010	4A	Kentucky River	Perry	77.05	89.70	37.35585	-83.35467	37.27737	-83.29289	2020
KY-2439	KY514290_08	Rename			North Fork Kentucky River 89.7 to 99.85	Big Willard Creek to Lotts Creek	River/Stream	514290	10.15	MILES	2016	5	Kentucky River	Perry	89.70	99.85	37.27737	-83.29289	37.28290	-83.19250	2020
KY-2440	KY514290_08A	Rename			North Fork Kentucky River 99.85 to 104.05	Lotts Creek to Hazard water withdrawal	River/Stream	514290	4.20	MILES	2010	4A	Kentucky River	Perry	99.85	104.05	37.28290	-83.19250	37.24655	-83.18176	2020
KY-2447	KY514292_02	Rename			North Fork Licking River 12.3 to 13.45	Bucket Branch to Devils Fork	River/Stream	514292	1.15	MILES	2004	5	Licking River	Morgan	12.30	13.45	38.05192	-83.31651	38.04413	-83.30378	2020
KY-1394	KY499554_02	Rename			North Fork Licking River 18.55 to 45.45	Willow Branch to Wells Creek	River/Stream	499554	26.90	MILES	2020	5	Licking River	Bracken, Robertson, Mason	18.55	45.45	38.60408	-84.06902	38.57292	-83.82034	2020
KY-1393	KY499554_01	Rename			North Fork Licking River 2.3 to 18.55	Willow Creek to Willow Branch	River/Stream	499554	16.25	MILES	2020	5	Licking River	Bracken, Robertson	2.30	18.55	38.58582	-84.17635	38.60408	-84.06902	2020
KY-1395	KY499554_03	Rename			North Fork Licking River 45.45 to 52.55	Wells Creek to Mill Creek	River/Stream	499554	7.10	MILES	2012	2	Licking River	Mason	45.45	52.55	38.57292	-83.82034	38.55197	-83.78169	2020
KY-2446	KY514292_01	Rename			North Fork Licking River 8.4 to 12.3	Cave Run Lake Backwaters (0.25 River Miles Downstream of Lick Branch) to Bucket Branch	River/Stream	514292	3.90	MILES	2020	4A	Licking River	Rowan, Morgan	8.40	12.30	38.06586	-83.36149	38.05192	-83.31651	2020
KY-1396	KY499555_01	Rename			North Fork Little River 0.0 to 0.3	Little River to Hammond Wood WWTP	River/Stream	499555	0.30	MILES	2012	5	Lower Cumberland River	Christian	0.00	0.30	36.80059	-87.51678	36.80361	-87.51373	2020
KY-1397	KY499555_02	Rename			North Fork Little River 0.3 to 7.0	Hammond Wood WWTP to Urban Area/SR 695	River/Stream	499555	6.70	MILES	2012	5	Lower Cumberland River	Christian	0.30	7.00	36.80361	-87.51373	36.84395	-87.51946	2020
KY-1399	KY499555_04	Rename			North Fork Little River 10.9 to 16.2	Northside WWTP to Upper and Lower Forks	River/Stream	499555	5.30	MILES	2012	5	Lower Cumberland River	Christian	10.90	16.20	36.87006	-87.51031	36.88759	-87.45627	2020
KY-1398	KY499555_03	Rename			North Fork Little River 7.0 to 10.9	Urban Area/SR 695 to North Side WWTP	River/Stream	499555	3.90	MILES	2012	5	Lower Cumberland River	Christian	7.00	10.90	36.84395	-87.51946	36.87006	-87.51031	2020
KY-3110		Split	KY-1400	KY499559_01	North Fork Nolin River 1.3 to 5.85	Spring run of Nolynn Spring to Hodgenville Water Works	River/Stream	499559	4.55	MILES	2020	5	Green River	Larue	1.30	5.85	37.55891	-85.78801	37.57518	-85.73868	2020
KY-3111		Split	KY-1400	KY499559_01	North Fork Nolin River 5.85 to 7.05	Hodgenville Water Works to Castleman Creek (1.2 miles upstream)	River/Stream	499559	1.20	MILES	2020	5	Green River	Larue	5.85	7.05	37.57518	-85.73868	37.58215	-85.72865	2020
KY-1401	KY499560_01	Rename			North Fork North Benson Creek 0.0 to 2.2	Mouth to Quire and Sudduth Branch	River/Stream	499560	2.20	MILES	2000	5	Kentucky River	Franklin	0.00	2.20	38.21280	-84.97207	38.23788	-84.98147	2020
KY-1402	KY499562_01	Rename			North Fork Panther Creek 0.0 to 4.2	Mouth to Burnett Fork	River/Stream	499562	4.20	MILES	2008	5	Green River	Daviess	0.00	4.20	37.70206	-87.08982	37.72099	-87.02080	2020
KY-1403	KY499562_02	Rename			North Fork Panther Creek 4.2 to 9.1	Burnett Fork to Joes Branch	River/Stream	499562	4.90	MILES	2008	5	Green River	Daviess	4.20	9.10	37.72099	-87.02080	37.71441	-86.93414	2020
KY-1404	KY499562_03	Rename			North Fork Panther Creek 9.1 to 9.7	Joes Branch to Joes Run	River/Stream	499562	0.60	MILES	2014	5	Green River	Daviess	9.10	9.70	37.71441	-86.87202	37.71328	-86.92374	2020
KY-1405	KY499562_04	Rename			North Fork Panther Creek 9.7 to 12.6	Joes Run to UT	River/Stream	499562	2.90	MILES	2002	5	Green River	Daviess	9.70	12.60	37.71329	-86.92374	37.71049	-86.87211	2020
KY-1406	KY499564_01	Rename			North Fork Rough River 19.4 to 22.1	Rough River Lake Backwaters to Buffalo Creek	River/Stream	499564	2.70	MILES	2020	4C	Green River	Breckinridge	19.40	22.10	37.69005	-86.39439	37.70023	-86.38206	2020
KY-2778		Split	KY-1407	KY499564_02	North Fork Rough River 22.1 to 26.9	Buffalo Creek to Reservoir Dam (Historic)	River/Stream	499564	4.80	MILES	2020	2	Green River	Breckinridge	22.10	26.90	37.70023	-86.38206	37.71212	-86.32604	2020
KY-2779		Split	KY-1407	KY499564_02	North Fork Rough River 26.9 to 29.5	Reservoir Dam (Historic) to headwaters	River/Stream	499564	2.60	MILES	2020	2	Green River	Breckinridge	26.90	29.50	37.71212	-86.32604	37.71476	-86.28374	2020
KY-2448	KY514293_01	Rename			North Fork Triplett Creek 0.0 to 4.9	Mouth to Bratton Branch (Landuse transition from rural to urban)	River/Stream	514293	4.90	MILES	2020	4A	Licking River	Rowan	0.00	4.90	38.15164	-83.51933	38.18669	-83.49521	2020
KY-2450	KY514293_03	Rename			North Fork Triplett Creek 14.95 to 15.95	1 mile downstream to Tennessee Gas discharge	River/Stream	514293	1.00	MILES	2000	2	Licking River	Rowan	14.95	15.95	38.27663	-83.41387	38.28394	-83.40152	2020
KY-2451	KY514293_04	Rename			North Fork Triplett Creek 17.0 to 19.0	Holly Fork to Mouth of Elk Lick Fork	River/Stream	514293	2.00	MILES	2016	4A	Licking River	Rowan	17.00	19.00	38.29355	-83.39107	38.31907	-83.39026	2020
KY-2449	KY514293_02	Rename			North Fork Triplett Creek 8.15 to 12.25	Big Brushy Creek to DeBord Branch	River/Stream	514293	4.10	MILES	2020	4A	Licking River	Rowan	8.15	12.25	38.20971	-83.46724	38.25084	-83.43457	2020
KY-1408	KY499573_01	Rename			North Fork Whippoorwill Creek 1.2 to 2.45	UT to North Fork Whippoorwill Creek to UT to North Fork Whippoorwill Creek	River/Stream	499573	1.25	MILES	2014	5	Lower Cumberland River	Todd	1.20	2.45	36.88096	-87.10672	36.87866	-87.11988	2020
KY-3220					North Little Kincaid Creek 0.0 to 6.6	Mouth to Headwaters	River/Stream	499576	6.60	MILES	2020	4C	Licking River	Pendleton	0.00	6.60	38.72356	-84.30199	38.78684	-84.27334	2020
KY-1409	KY499585-3.55_01	Rename			North Prong Long Lick Creek UT 0.45 to 0.55	River mile 0.45 (approximately) to headwaters	River/Stream	499585	0.10	MILES	2012	3	Salt River	Washington	0.45	0.55	37.80328	-85.11863	37.80330	-85.11695	2020
KY-1410	KY499587_01	Rename			North Rolling Fork 0.0 to 3.75	Mouth to Jones Creek	River/Stream	499587	3.75	MILES	2002	2	Salt River	Marion	0.00	3.75	37.49209	-85.15960	37.51427	-85.12164	2020
KY-1411	KY499587_02	Rename			North Rolling Fork 16.7 to 21.1	Minor Branch to Carpenter Fork	River/Stream	499587	4.40	MILES	2002	2	Salt River	Boyle	16.70	21.10	37.55094	-84.97123	37.54599	-84.90667	2020
KY-1412	KY499592_01	Rename			North Severn Creek 0.0 to 2.1	Mouth to 1 mile below Elmer Davis Dam	River/Stream	499592	2.10	MILES	2004	2	Kentucky River	Owen	0.00	2.10	38.46645	-84.89242	38.48689	-84.88628	2020
KY-1414	KY499598_01	Rename			Northern Ditch 0.0 to 7.3	Mouth to Fern Creek Confluence	River/Stream	499598	7.30	MILES	2014	5	Salt River	Jefferson	0.00	7.30	38.12568	-85.77004	38.14979	-85.65641	2020
KY-1415	KY499618_00	Rename			Nortonville Lake	Entire Reservoir	Lake/Reservoir	499618	26	ACRES	2008	2	Green River	Hopkins			37.18289	-87.46448	37.18045	-87.47039	2020
KY-1416	KY499623_01	Rename			Nosey Creek 0.0 to 1.8	Mouth to Dry Run	River/Stream	499623	1.80	MILES	2014	2	Green River	Grayson	0.00	1.80	37.45737	-86.06731	37.46702	-86.08121	2020
KY-1417	KY499767_01	Rename			Obion Creek 1.35 to 16.5	Bayou de Chien to Cane Creek	River/Stream	499767	15.15	MILES	2020	5	Mississippi River	Hickman, Fulton	1.35	16.50	36.57688	-89.19208	36.69533	-89.07029	2020
KY-1418	KY499767_02	Rename			Obion Creek 26.55 to 33.8	Hurricane Creek to Guess Creek	River/Stream	499767	7.25	MILES	2010	2	Mississippi River	Hickman, Carlisle	26.55	33.80	36.75480	-89.01162	36.77666	-88.94879	2020
KY-1419	KY499767_03	Rename			Obion Creek 33.8 to 37.45	Guess Creek to Little Creek	River/Stream	499767	3.65	MILES	2010	5	Mississippi River	Hickman, Carlisle	33.80	37.45	36.77666	-88.94879	36.76672	-88.91256	2020
KY-3324		Split	KY-1420	KY499767_04	Obion Creek 46.2 to 47.5	UT to Brush Creek	River/Stream	499767	1.30	MILES	2010	5	Mississippi River	Hickman	46.20	47.50	36.71283	-88.84651	36.69823	-88.83248	2020
KY-1421	KY499767_05	Rename			Obion Creek 47.5 to 53.05	Brush Creek to Opossum Creek	River/Stream	499767	5.55	MILES	2010	5	Mississippi River	Graves, Hickman	47.50	53.05	36.69823	-88.83248	36.69037	-88.73571	2020
KY-1422	KY499767_06	Rename			Obion Creek 53.05 to 59.25	Opossum Creek to Little Cypress Creek	River/Stream	499767	6.20	MILES	2010	5	Mississippi River	Graves	53.05	59.25	36.69037	-88.73571	36.63365	-88.67978	2020
KY-3323		Split	KY-1420	KY499767_04	Obion Creek UT 0.0 to 2.1	Mouth to Obion Creek	River/Stream	499767	2.10	MILES	2010	5	Mississippi River	Hickman	0.00	2.10	36.73798	-88.86864	36.71283	-88.84651	2020
KY-1107	KY496697_01	Rename			Obion Creek UT 0.0 to 2.7	Mouth to Little Cypress Creek	River/Stream	1296225	2.70	MILES	2006	5	Mississippi River	Hickman	0.00	2.70	36.75182	-88.89726	36.73803	-88.88274	2020
KY-1423	KY499767-16.8_01	Rename			Obion Creek UT 1.6 to 2.2	Land Use Change to Land Use Change	River/Stream	499767	0.60	MILES	2004	5	Mississippi River	Hickman	1.60	2.20	36.71808	-89.09712	36.72417	-89.10228	2020
KY-60	KY425264_01	Rename			Ohio River 319.4 to 317.2	Near Mouth Keys Creek to KY/WV State Line	River/Stream	425264	2.20	MILES	2014	5	Ohio River	Boyd	319.40	317.20	38.44864	-82.60478	38.42130	-82.59549	2020
KY-61	KY425264_02	Rename			Ohio River 341.0 to 319.4	Greenup L & D to Near Mouth of Keys Creek	River/Stream	425264	21.60	MILES	2014	5	Ohio River	Boyd, Greenup	341.00	319.40	38.64556	-82.85813	38.44864	-82.60478	2020
KY-62	KY425264_03	Rename			Ohio River 356.6 to 341.0	Mouth Scioto River to Near Greenup L & D	River/Stream	425264	15.60	MILES	2014	5	Ohio River	Greenup	356.60	341.00	38.72778	-83.01622	38.64556	-82.85813	2020
KY-63	KY425264_04	Rename			Ohio River 377.7 to 356.6	Upstream SR10 Bridge to Mouth of Scioto River	River/Stream	425264	21.10	MILES	2014	5	Ohio River	Lewis, Greenup	377.70	356.60	38.60081	-83.31072	38.72778	-83.01622	2020
KY-64	KY425264_05	Rename			Ohio River 382.2 to 377.7	~0.3 miles downstream of Mouth of Quicks Run to Upstream SR 10 Bridge	River/Stream	425264	4.50	MILES	2014	5	Ohio River	Lewis	382.20	377.70	38.65089	-83.35459	38.60081	-83.31072	2020
KY-65	KY425264_06	Rename			Ohio River 388.0 to 382.2	Near Mouth of Bush Creek to ~0.3 miles Downstream of Mouth of Quicks Run	River/Stream	425264	5.80	MILES	2014	5	Ohio River	Lewis	388.00	382.20	38.67170	-83.45560	38.65089	-83.35459	2020
KY-66	KY425264_07	Rename			Ohio River 436.2 to 388.0	Meldahl Locks and Dam to Near Mouth Brush Creek	River/Stream	425264	48.20	MILES	2014	5	Ohio River	Bracken, Lewis, Mason	436.20	388.00	38.79468	-84.17121	38.67170	-83.45560	2020
KY-67	KY425264_08	Rename			Ohio River 461.3 to 436.2	Near Mouth of Four Mile Creek to Meldahl Lock and Dam	River/Stream	425264	25.10	MILES	2014	5	Ohio River	Pendleton, Bracken, Campbell	461.30	436.20	39.07794	-84.43345	38.79468	-84.17121	2020
KY-68	KY425264_09	Rename			Ohio River 465.2 to 461.3	0.2 miles downstream of Little Miami River to near mouth of Fourmile Creek	River/Stream	425264	3.90	MILES	2014	5	Ohio River	Campbell	465.20	461.30	39.07794	-84.43345	39.10305	-84.43840	2020
KY-69	KY425264_10	Rename			Ohio River 469.3 to 465.2	~0.2 miles upstream of I-475 bridge to 0.2 miles downstream of Little Miami River	River/Stream	425264	4.10	MILES	2014	5	Ohio River	Campbell	469.30	465.20	39.10093	-84.49426	39.10305	-84.43840	2020
KY-70	KY425264_11	Rename			Ohio River 471.1 to 465.2	Near US 42 Bridge to ~0.2 miles upstream of I-475 Bridge	River/Stream	425264	5.90	MILES	2014	5	Ohio River	Kenton, Campbell	471.10	465.20	39.09102	-84.52021	39.10093	-84.49426	2020
KY-71	KY425264_12	Rename			Ohio River 475.1 to 471.1	~1.1 Miles Downstream of Pleasant Run Creek to Near US 42 Bridge	River/Stream	425264	4.00	MILES	2014	5	Ohio River	Kenton	475.10	471.10	39.07889	-84.58156	39.09102	-84.52021	2020
KY-72	KY425264_13	Rename			Ohio River 477.5 to 475.1	Dry Creek to ~ 1 mile downstream of Pleasant Run Creek	River/Stream	425264	2.40	MILES	2014	5	Ohio River	Kenton	477.50	475.10	39.07304	-84.62383	39.07889	-84.58156	2020
KY-73	KY425264_14	Rename			Ohio River 488.2 to 477.5	Sand Run to Dry Creek	River/Stream	425264	10.70	MILES	2014	5	Ohio River	Boone	488.20	477.50	39.12827	-84.77333	39.07304	-84.62383	2020
KY-74	KY425264_14.5	Rename			Ohio River 531.5 to 488.2	Markland L & D to Sand Run	River/Stream	425264	43.30	MILES	2014	5	Ohio River	Boone, Gallatin	531.50	488.20	38.77638	-84.96405	39.12827	-84.77333	2020
KY-75	KY425264_15	Rename			Ohio River 593.4 to 531.5	Downstream Tip of 12 Mile Island to Markland L & D	River/Stream	425264	61.90	MILES	2014	5	Ohio River	Jefferson, Gallatin, Oldham, Carroll, Trimble	593.40	531.50	38.36568	-85.63165	38.77638	-84.96405	2020
KY-76	KY425264_16	Rename			Ohio River 595.8 to 593.4	Harrods Creek to Downstream Tip of 12 Mile Island	River/Stream	425264	2.40	MILES	2014	5	Ohio River	Jefferson	595.80	593.40	38.36568	-85.63164	38.33315	-85.64680	2020
KY-77	KY425264_17	Rename			Ohio River 603.1 to 595.8	I-65 Bridge to Harrods Creek	River/Stream	425264	7.30	MILES	2014	5	Ohio River	Jefferson	603.10	595.80	38.33315	-85.64680	38.26458	-85.74405	2020
KY-78	KY425264_18	Rename			Ohio River 605.8 to 603.1	McAlpin Locks and Dam to I-65 Bridge	River/Stream	425264	2.70	MILES	2014	5	Ohio River	Jefferson	605.80	603.10	38.26458	-85.74405	38.28300	-85.78043	2020
KY-79	KY425264_19	Rename			Ohio River 608.6 to 605.8	I-64 Bridge to McAlpin Locks and Dam	River/Stream	425264	2.80	MILES	2014	5	Ohio River	Jefferson	608.60	605.80	38.28300	-85.78043	38.27838	-85.82294	2020
KY-80	KY425264_20	Rename			Ohio River 613.1 to 608.6	North Paddys Run to I-64 Bridge	River/Stream	425264	4.50	MILES	2014	5	Ohio River	Jefferson	613.10	608.60	38.27838	-85.82294	38.22104	-85.85133	2020
KY-81	KY425264_21	Rename			Ohio River 676.8 to 614.0	Wolf Creek to Near Paddys Run	River/Stream	425264	62.80	MILES	2014	5	Ohio River	Meade, Jefferson, Hardin	676.80	614.00	38.10734	-86.39389	38.21235	-85.86390	2020
KY-82	KY425264_22	Rename			Ohio River 720.8 to 676.8	Cannelton Locks and Dam to Wolf Creek	River/Stream	425264	44.00	MILES	2014	5	Ohio River	Breckinridge, Hancock	720.80	676.80	37.89845	-86.70348	38.10734	-86.39389	2020
KY-83	KY425264_23	Rename			Ohio River 736.7 to 720.8	Yellow Creek to Cannelton Locks and Dam	River/Stream	425264	15.90	MILES	2014	5	Ohio River	Hancock	736.70	720.80	37.95444	-86.88998	37.89845	-86.70348	2020
KY-84	KY425264_24	Rename			Ohio River 756.3 to 736.7	Glover Cary Bridge to Yellow Creek	River/Stream	425264	19.60	MILES	2014	5	Ohio River	Hancock, Daviess	756.30	736.70	37.77879	-87.10837	37.95444	-86.88998	2020
KY-85	KY425264_25	Rename			Ohio River 760.6 to 756.3	Near Upstream End of Little Hurricane Island to Glover Cary Bridge	River/Stream	425264	4.30	MILES	2014	5	Ohio River	Daviess	760.60	756.30	37.82029	-87.14816	37.77879	-87.10837	2020
KY-86	KY425264_26	Rename			Ohio River 776.0 to 760.6	Newburgh Locks and Dam to Near the Upstream End of Little Hurricane Island	River/Stream	425264	15.40	MILES	2014	5	Ohio River	Daviess, Henderson	776.00	760.60	37.92866	-87.37496	37.82029	-87.14816	2020
KY-87	KY425264_27	Rename			Ohio River 789.3 to 776.0	~2.5 miles downstream of US41 Bridge to Newburgh Locks and Dam	River/Stream	425264	13.30	MILES	2014	5	Ohio River	Henderson	789.30	776.00	37.92755	-87.58521	37.92865	-87.37495	2020
KY-88	KY425264_28	Rename			Ohio River 792.1 to 789.3	Near Evansville Pumping Station to ~2.5 miles Downstream of US 41 Bridge	River/Stream	425264	2.80	MILES	2014	5	Ohio River	Henderson	792.10	789.30	37.92755	-87.58521	37.96790	-87.58058	2020
KY-89	KY425264_29	Rename			Ohio River 793.2 to 792.1	Near Pigeon Creek (IN) to Near Evansville Pumping Station	River/Stream	425264	1.10	MILES	2014	5	Ohio River	Henderson	793.20	792.10	37.97262	-87.59306	37.96795	-87.58062	2020
KY-90	KY425264_30	Rename			Ohio River 795.7 to 793.2	0.8 miles upstream of Bayou Creek (IN) to Near Pigeon Creek (IN)	River/Stream	425264	2.50	MILES	2014	5	Ohio River	Henderson	795.70	793.20	37.97260	-87.59319	37.94056	-87.61148	2020
KY-91	KY425264_31	Rename			Ohio River 798.8 to 795.7	0.55 miles upstream of Navigation Light to 0.8 miles upstream of Bayou Creek (IN)	River/Stream	425264	3.10	MILES	2014	5	Ohio River	Henderson	798.80	795.70	37.94056	-87.61148	37.90386	-87.61156	2020
KY-92	KY425264_32	Rename			Ohio River 802.9 to 798.8	0.9 miles downstream of boat ramp to 0.55 miles upstream of Navigation Light	River/Stream	425264	4.10	MILES	2014	5	Ohio River	Henderson	802.90	798.80	37.90386	-87.61156	37.85608	-87.58951	2020
KY-93	KY425264_33	Rename			Ohio River 820.1 to 802.9	1.1 miles upstream of boat ramp at end of Diamond Island to 0.9 miles downstream of boat ramp	River/Stream	425264	17.20	MILES	2014	5	Ohio River	Henderson	820.10	802.90	37.86677	-87.76273	37.85608	-87.58951	2020
KY-94	KY425264_34	Rename			Ohio River 826.2 to 820.1	0.9 miles upstream of Mt. Vernon Towhead to 1.1 miles upstream of boat ramp at end of Diamond Island	River/Stream	425264	6.10	MILES	2014	5	Ohio River	Henderson	826.20	820.10	37.89756	-87.85954	37.86677	-87.76273	2020
KY-95	KY425264_35	Rename			Ohio River 845.95 to 826.2	J T Meyer L & D to 0.9 miles upstream of Mount Vernon Towhead	River/Stream	425264	19.75	MILES	2014	5	Ohio River	Union, Henderson	845.95	826.20	37.89756	-87.85954	37.79240	-87.99503	2020
KY-96	KY425264_36	Rename			Ohio River 847.3 to 845.95	~0.6 miles above mouth of Wabash River to J T Meyer L & D	River/Stream	425264	1.35	MILES	2014	5	Ohio River	Union	847.30	845.95	37.79240	-87.99503	37.80112	-88.01575	2020
KY-97	KY425264_37	Rename			Ohio River 853.4 to 847.3	Near Downstream Tip of Unnamed Island to ~0.6 miles above the mouth of Wabash River	River/Stream	425264	6.10	MILES	2014	5	Ohio River	Union	853.40	847.30	37.80112	-88.01575	37.73017	-88.07026	2020
KY-98	KY425264_38	Rename			Ohio River 857.6 to 853.4	Upstream edge of Old Shawnee Town to Near Downstream Tip of Unnamed Island	River/Stream	425264	4.20	MILES	2014	5	Ohio River	Union	857.60	853.40	37.73017	-88.07026	37.69800	-88.12744	2020
KY-99	KY425264_39	Rename			Ohio River 862.1 to 857.6	0.6 miles downstream of unnamed island to upstream edge of Old Shawneetown	River/Stream	425264	4.50	MILES	2014	5	Ohio River	Union	862.10	857.60	37.69800	-88.12744	37.64181	-88.15609	2020
KY-100	KY425264_40	Rename			Ohio River 872.8 to 862.1	~0.5 mile upstream of Tradewater River to 0.6 mile downstream of unnamed island	River/Stream	425264	10.70	MILES	2014	5	Ohio River	Union	872.80	862.10	37.64181	-88.15609	37.51255	-88.06540	2020
KY-101	KY425264_41	Rename			Ohio River 878.2 to 872.8	~0.4 mile downstream of Crooked Creek to ~0.5 mile upstream of Tradewater River	River/Stream	425264	5.40	MILES	2014	5	Ohio River	Crittenden	878.20	872.80	37.51255	-88.06540	37.46978	-88.11720	2020
KY-102	KY425264_42	Rename			Ohio River 882.9 to 878.2	Shawnee National Forest East Boundary to ~0.4 mile downstream of Crooked Creek	River/Stream	425264	4.70	MILES	2014	5	Ohio River	Crittenden	882.90	878.20	37.46978	-88.11720	37.45801	-88.19955	2020
KY-103	KY425264_43	Rename			Ohio River 894.6 to 882.9	~1.1 miles downstream of Buck Creek to Shawnee National Forest East Boundary	River/Stream	425264	11.70	MILES	2014	5	Ohio River	Crittenden, Livingston	894.60	882.90	37.45801	-88.19955	37.40998	-88.38060	2020
KY-104	KY425264_44	Rename			Ohio River 910.3 to 894.6	~0.7 miles downstream of Sisters Island to ~1.1 miles downstream of Buck Creek	River/Stream	425264	15.70	MILES	2014	5	Ohio River	Livingston	910.30	894.60	37.40998	-88.38060	37.26235	-88.50510	2020
KY-105	KY425264_45	Rename			Ohio River 920.5 to 910.3	Near Mouth of Cumberland River to ~0.7 miles downstream of Sisters Island	River/Stream	425264	10.20	MILES	2014	5	Ohio River	Livingston	920.50	910.30	37.26235	-88.50510	37.14259	-88.42416	2020
KY-106	KY425264_46	Rename			Ohio River 925.8 to 920.5	0.2 mile upstream of Goodlow Slough to Near Mouth of Cumberland River	River/Stream	425264	5.30	MILES	2014	5	Ohio River	Livingston	925.80	920.50	37.14259	-88.42416	37.07887	-88.45692	2020
KY-107	KY425264_47	Rename			Ohio River 938.9 to 925.8	Lock and Dam 52 to 0.2 mile upstream of Goodlow Slough	River/Stream	425264	13.10	MILES	2014	5	Ohio River	McCracken, Livingston	938.90	925.80	37.07887	-88.45692	37.12255	-88.65646	2020
KY-108	KY425264_48	Rename			Ohio River 981.3 to 938.9	Mouth to Lock and Dam 52	River/Stream	425264	42.40	MILES	2014	5	Ohio River	McCracken, Ballard	981.30	938.90	37.12255	-88.65646	36.98733	-89.13280	2020
KY-128	KY485832_00	Rename			Old Alexandria Reservoir	Entire Reservoir	Lake/Reservoir	485832	8	ACRES	2008	5	Ohio River	Campbell			38.96171	-84.37111	38.95946	-84.37240	2020
KY-1424	KY499795-0.1_01	Rename			Old Beaver Dam Slough UT 0.0 to 0.5	Mouth to I-24 Bridge	River/Stream	499795	0.50	MILES	2002	5	Tennessee River	Marshall	0.00	0.50	37.01995	-88.30812	37.01572	-88.30010	2020
KY-2452	KY514326_01	Rename			Old House Creek 0.0 to 1.1	Mouth to Forested Reach	River/Stream	514326	1.10	MILES	2016	2	Licking River	Rowan	0.00	1.10	38.18398	-83.34197	38.17323	-83.32985	2020
KY-3221					Old Knob Creek UT 0.0 to 2.5	Mouth to Headwaters	River/Stream	499849	2.50	MILES	2020	4C	Mississippi River	Graves	0.00	2.50	36.52515	-88.63528	36.54750	-88.60959	2020
KY-1450	KY500154_01	Rename			Old Panther Creek 0.4 to 6.85	Loss of Buffer to Point of Increased Buffer	River/Stream	500154	6.45	MILES	2004	5	Green River	Daviess	0.40	6.85	37.68354	-87.20158	37.67532	-87.18021	2020
KY-1451	KY500154_02	Rename			Old Panther Creek 6.85 to 8.8	Point of increased buffer to Headwaters/Panther Creek	River/Stream	500154	1.95	MILES	2004	5	Green River	Daviess	6.85	8.80	37.69305	-87.17940	37.67532	-87.18021	2020
KY-1425	KY499874_01	Rename			Old Road Fork 0.0 to 2.1	Walnut Fork to Lynn Bark Fork	River/Stream	499874	2.10	MILES	2010	2	Big Sandy River	Martin	0.00	2.10	37.78714	-82.52146	37.76667	-82.54381	2020
KY-1426	KY499901_01	Rename			Oldfield Fork 0.0 to 3.65	Mouth to headwaters	River/Stream	499901	3.65	MILES	2006	5	Licking River	Morgan	0.00	3.65	37.85766	-83.37018	37.85023	-83.42994	2020
KY-1427	KY499914_01	Rename			Oldtown Creek 0.0 to 1.9	Mouth to North Fork Oldtown Creek	River/Stream	499914	1.90	MILES	2004	5	Little Sandy River	Greenup	0.00	1.90	38.43758	-82.87832	38.44670	-82.90031	2020
KY-1428	KY499926_00	Rename			Olive Hill Reservoir	Dam to Lake Boundaries	Lake/Reservoir	499926	23	ACRES	2020	3	Tygarts Creek	Carter			38.31200	-83.21328	38.31622	-83.21913	2020
KY-1429	KY499953_01	Rename			Open Fork Paint Creek 6.25 to 11.4	Smith Creek to Pasture Branch	River/Stream	499953	5.15	MILES	2016	5	Big Sandy River	Morgan	6.25	11.40	37.94725	-83.00695	37.97733	-83.06789	2020
KY-1430	KY499953-10.55_01	Rename			Open Fork Paint Creek UT 0.0 to 0.8	Mouth to Headwaters	River/Stream	499953	0.80	MILES	2006	2	Big Sandy River	Morgan	0.00	0.80	37.97373	-83.05614	37.98497	-83.05212	2020
KY-1431	KY499959_01	Rename			Opossum Creek 0.0 to 2.3	Mouth to Richard Creek	River/Stream	499959	2.30	MILES	2000	5	Mississippi River	Graves	0.00	2.30	36.69028	-88.73574	36.69811	-88.69827	2020
KY-1432	KY499964_01	Rename			Opossum Run 0.0 to 1.6	Mouth to below Pond	River/Stream	499964	1.60	MILES	2016	5	Green River	Muhlenberg	0.00	1.60	37.15851	-87.16407	37.18050	-87.15958	2020
KY-1433	KY500021_01	Rename			Otter Creek 0.0 to 0.55	Mouth to Confluence with Left Fork Otter Creek and Right Fork Otter Creek	River/Stream	500021	0.55	MILES	2010	5	Big Sandy River	Floyd	0.00	0.55	37.35397	-82.71636	37.34645	-82.71597	2020
KY-2780		Split	KY-1436	KY500024_01	Otter Creek 0.0 to 1.7	Mouth to Land Use Change (0.04 River Miles Downstream of West Fork Otter Creek)	River/Stream	500024	1.70	MILES	2020	4A	Salt River	Larue	0.00	1.70	37.53110	-85.58472	37.50830	-85.58171	2020
KY-1437	KY500025_01	Rename			Otter Creek 0.0 to 4.0	Mouth to East Fork Otter Creek	River/Stream	500025	4.00	MILES	2016	4A	Kentucky River	Madison	0.00	4.00	37.88274	-84.26591	37.84962	-84.25686	2020
KY-1434	KY500023_01	Rename			Otter Creek 0.0 to 6.4	Mouth to UT	River/Stream	500023	6.40	MILES	2004	5	Green River	Hopkins	0.00	6.40	37.50174	-87.35949	37.48122	-87.42454	2020
KY-2925		Split	KY-2884		Otter Creek 0.0 to 8.5	Mouth to US Army Fort Knox A	River/Stream	500026	8.50	MILES	2020	5	Ohio River	Meade	0.00	8.50	37.96425	-86.03251	37.89558	-86.02574	2020
KY-2781		Split	KY-1436	KY500024_01	Otter Creek 1.7 to 2.9	Land Use Change (0.04 River Miles Downstream of West Fork Otter Creek) to East and Middle Forks of Otter Creek	River/Stream	500024	1.20	MILES	2020	4A	Salt River	Larue	1.70	2.90	37.50830	-85.58171	37.49520	-85.57644	2020
KY-1439	KY500027_01	Rename			Otter Creek 14.0 to 22.05	Lake Cumberland Backwaters to Carpenter Fork	River/Stream	500027	8.05	MILES	2020	2	Upper Cumberland River	Wayne	14.00	22.05	36.76934	-84.96683	36.70801	-84.95672	2020
KY-1435	KY500023_02	Rename			Otter Creek 6.4 to 16.0	UT to Headwaters	River/Stream	500023	9.60	MILES	2014	5	Green River	Hopkins	6.40	16.00	37.48122	-87.42454	37.39439	-87.53549	2020
KY-2926		Split	KY-2884		Otter Creek 8.5 to 9.7	US Fort Knox A to 1.8 River Miles Upstream of US-60 Owensboro Highway	River/Stream	500026	1.20	MILES	2020	5	Ohio River	Meade	8.50	9.70	37.89558	-86.02574	37.88584	-86.01741	2020
KY-2883		Split	KY-1438	KY500026_01	Otter Creek 9.7 to 10.9	1.8 River Miles Upstream of US-60 Owensboro Highway to Dry Branch	River/Stream	500026	1.20	MILES	2020	5	Ohio River	Meade	9.70	10.90	37.88584	-86.01741	37.87783	-86.00325	2020
KY-1440	KY500050_01	Rename			Overalls Creek 0.0 to 1.35	Mouth to East Fork Overalls Creek/West Fork Overalls Creek Confluence	River/Stream	500050	1.35	MILES	2020	2	Salt River	Bullitt	0.00	1.35	37.87043	-85.60360	37.88749	-85.60604	2020
KY-1441	KY500073_01	Rename			Owens Creek 1.7 to 2.3	UT to Outfall	River/Stream	500073	0.60	MILES	2008	3	Tradewater River	Webster	1.70	2.30	37.38445	-87.78116	37.38723	-87.77194	2020
KY-1442	KY500086-2.0_01	Rename			Owl Creek UT 0.0 to 0.45	Mouth to Discharge	River/Stream	500086	0.45	MILES	2020	3	Ohio River	Campbell	0.00	0.45	39.00629	-84.40590	39.00072	-84.40846	2020
KY-3222					Owl Creek UT 0.45 to 1.1	Discharge to Headwaters	River/Stream	500086	0.65	MILES	2020	5	Ohio River	Campbell	0.45	1.10	39.00072	-84.40846	39.00377	-84.41879	2020
KY-37	KY2504941_00	Rename			Owsley Fork Reservoir	Dam to Lake Boundaries	Lake/Reservoir	2504941	164	ACRES	2016	2	Kentucky River	Madison			37.54578	-84.18384	37.53621	-84.16544	2020
KY-1443	KY500100_01	Rename			Paddle Creek 0.0 to 1.6	Mouth to Headwaters	River/Stream	500100	1.60	MILES	2004	5	Big Sandy River	Boyd	0.00	1.60	38.39684	-82.59872	38.39759	-82.62106	2020
KY-3251					Paddy Run 0.0 to 1.15	Mouth to Headwaters	River/Stream	500103	1.15	MILES	2020	3	Ohio River	Jefferson	0.00	1.15	38.21944	-85.84961	38.21559	-85.83708	2020
KY-1444	KY500114_01	Rename			Paint Creek 0.0 to 7.1	Mouth to Mudlick Creek	River/Stream	500114	7.10	MILES	2016	5	Big Sandy River	Johnson	0.00	7.10	37.81466	-82.79098	37.83251	-82.85749	2020
KY-1445	KY500114_02	Rename			Paint Creek 7.1 to 8.2	Mudlick Creek to Paintsville Reservoir Dam	River/Stream	500114	1.10	MILES	2020	5	Big Sandy River	Johnson	7.10	8.20	37.83251	-82.85750	37.83835	-82.87148	2020
KY-1446	KY500121_01	Rename			Paint Lick Creek 0.0 to 7.7	Mouth to Back Creek	River/Stream	500121	7.70	MILES	2020	4A	Kentucky River	Garrard, Madison	0.00	7.70	37.76944	-84.52589	37.70783	-84.48043	2020
KY-1447	KY500121_02	Rename			Paint Lick Creek 7.7 to 22.6	Back Creek to Lowell Branch	River/Stream	500121	14.90	MILES	2000	2	Kentucky River	Garrard, Madison	7.70	22.60	37.70783	-84.48043	37.61851	-84.42247	2020
KY-2058	KY509958_00	Rename			Paintsville Lake	Dam to Lake Boundaries	Lake/Reservoir	509958	1256	ACRES	2020	5	Big Sandy River	Johnson			37.84032	-82.87130	37.94638	-83.00573	2020
KY-1448	KY500145_00	Rename			Panbowl Lake	Dam to Lake Boundaries	Lake/Reservoir	500145	86	ACRES	2016	2	Kentucky River	Breathitt			37.55756	-83.38572	37.55845	-83.36938	2020
KY-1452	KY500155_01	Rename			Panther Creek 0.0 to 3.1	Mouth to Pryor Branch	River/Stream	500155	3.10	MILES	2020	5	Tennessee River	Graves	0.00	3.10	36.82229	-88.51447	36.78158	-88.52913	2020
KY-1455	KY500156_01	Rename			Panther Creek 0.0 to 3.65	Mouth to Hickory Camp Creek	River/Stream	500156	3.65	MILES	2008	5	Green River	Butler	0.00	3.65	37.22186	-86.88579	37.22222	-86.85639	2020
KY-1456	KY500157_01	Rename			Panther Creek 0.1 to 2.95	Green River backwaters to Knoblick Creek	River/Stream	500157	2.85	MILES	2020	5	Green River	Daviess	0.10	2.95	37.73888	-87.32973	37.72541	-87.31055	2020
KY-3257		Split	KY-1449	KY500152_01	Panther Creek 0.4 to 3.0	Kentucky Lake Backwaters to Culpepper Hollow	River/Stream	500152	2.60	MILES	2020	2	Tennessee River	Calloway	0.40	3.00	36.56274	-88.15697	36.58386	-88.18583	2020
KY-1458	KY500157_03	Rename			Panther Creek 17.55 to 20.1	Old Panther Creek to Rhodes Creek	River/Stream	500157	2.55	MILES	2002	5	Green River	Daviess	17.55	20.10	37.69305	-87.17941	37.68836	-87.13961	2020
KY-1457	KY500157_02	Rename			Panther Creek 2.95 to 5.9	Knoblick Creek to Crooked Creek	River/Stream	500157	2.95	MILES	2004	4A	Green River	Daviess	2.95	5.90	37.72541	-87.31055	37.72519	-87.27982	2020
KY-3258		Split	KY-1449	KY500152_01	Panther Creek 3.0 to 5.75	Culpepper Hollow to Headwaters	River/Stream	500152	2.75	MILES	2020	4C	Tennessee River	Calloway	3.00	5.75	36.58386	-88.18583	36.59516	-88.22452	2020
KY-1453	KY500155_02	Rename			Panther Creek 3.1 to 4.2	Pryor Branch to Riley Branch	River/Stream	500155	1.10	MILES	2002	2	Tennessee River	Graves	3.10	4.20	36.78158	-88.52913	36.76663	-88.53064	2020
KY-1454	KY500155-1.8-0.3_01	Rename			Panther Creek UT of UT 0.0 to 1.8	Mouth to Headwaters	River/Stream	500155	1.80	MILES	2008	2	Tennessee River	Graves	0.00	1.80	36.79894	-88.53176	36.78302	-88.55220	2020
KY-1459	KY500162_01	Rename			Panther Fork 0.0 to 3.85	Mouth to Headwaters	River/Stream	500162	3.85	MILES	2020	5	Big Sandy River	Martin	0.00	3.85	37.72930	-82.55910	37.71161	-82.60559	2020
KY-2453	KY514432_01	Rename			Parched Corn Creek 0.0 to 2.25	Mouth to Headwaters	River/Stream	514432	2.25	MILES	2020	2	Kentucky River	Wolfe	0.00	2.25	37.81819	-83.59009	37.79001	-83.60143	2020
KY-2454	KY514447_01	Rename			Passenger Branch 0.0 to 1.95	Mouth to Headwaters	River/Stream	514447	1.95	MILES	2002	2	Licking River	Rowan	0.00	1.95	38.07823	-83.34272	38.10176	-83.35552	2020
KY-1460	KY500242_01	Rename			Patrick Branch 0.0 to 1.0	Mouth to Headwaters	River/Stream	500242	1.00	MILES	2016	5	Big Sandy River	Lawrence	0.00	1.00	38.01722	-82.52470	38.00885	-82.52821	2020
KY-2455	KY514450_01	Rename			Patterson Creek 0.0 to 5.35	Mouth to Bennetts Branch	River/Stream	514450	5.35	MILES	2000	2	Upper Cumberland River	Whitley	0.00	5.35	36.71983	-84.06768	36.68167	-84.04495	2020
KY-2456	KY514450_02	Rename			Patterson Creek 5.35 to 9.25	Bennetts Branch to Headwaters	River/Stream	514450	3.90	MILES	2002	2	Upper Cumberland River	Whitley	5.35	9.25	36.68167	-84.04495	36.64446	-84.03179	2020
KY-2457	KY514453_01	Rename			Patties Lick Branch 0.0 to 2.1	Mouth to Headwaters	River/Stream	514453	2.10	MILES	2016	2	Licking River	Rowan	0.00	2.10	38.18620	-83.35327	38.21359	-83.34545	2020
KY-1461	KY500281_01	Rename			Pawley Creek 0.0 to 1.0	Mouth to Land Use Change (Residential Development)/UT	River/Stream	500281	1.00	MILES	2012	5	Ohio River	Hardin	0.00	1.00	37.77527	-85.97167	37.76279	-85.97383	2020
KY-1463	KY500374_01	Rename			Penhook Branch 0.0 to 0.35	Mouth to Headwaters	River/Stream	500374	0.35	MILES	2010	3	Big Sandy River	Floyd	0.00	0.35	37.52636	-82.62653	37.52973	-82.62673	2020
KY-1464	KY500387_01	Rename			Pennsylvania Run 0.0 to 3.3	Mouth to McNeely Lake Dam	River/Stream	500387	3.30	MILES	2014	5	Salt River	Jefferson, Bullitt	0.00	3.30	38.06551	-85.64718	38.09701	-85.63644	2020
KY-1465	KY500391_00	Rename			Pennyrile Lake	Dam to Upper Lake	Lake/Reservoir	500391	52	ACRES	2020	2	Tradewater River	Christian			37.07311	-87.66502	37.06268	-87.66346	2020
KY-2458	KY514496_01	Rename			Perry Branch 0.0 to 4.15	Mouth to Headwaters	River/Stream	514496	4.15	MILES	2016	2	Licking River	Rowan	0.00	4.15	38.23087	-83.37412	38.27828	-83.36101	2020
KY-2459	KY514508_01	Rename			Peter Cave Branch 0.0 to 1.6	Mouth to UT (2nd Order)	River/Stream	514508	1.60	MILES	2002	2	Upper Cumberland River	Jackson	0.00	1.60	37.34348	-84.07597	37.33215	-84.05254	2020
KY-1466	KY500467_01	Rename			Peter Creek 0.0 to 5.8	Mouth to Right Fork/Left Fork	River/Stream	500467	5.80	MILES	2016	5	Big Sandy River	Pike	0.00	5.80	37.56680	-82.14460	37.51425	-82.15259	2020
KY-1467	KY500468_01	Rename			Peter Creek 11.65 to 18.45	Caney Fork to Dry Fork	River/Stream	500468	6.80	MILES	2020	4C	Green River	Barren	11.65	18.45	36.84608	-85.97090	36.80042	-85.90772	2020
KY-1468	KY500492_01	Rename			Pettys Fork 0.0 to 6.2	Mouth to Brush Creek	River/Stream	500492	6.20	MILES	2008	5	Green River	Adair	0.00	6.20	37.11602	-85.35816	37.06198	-85.32757	2020
KY-1469	KY500504_01	Rename			Peyton Creek 0.0 to 4.1	Mouth to Headwaters	River/Stream	500504	4.10	MILES	2008	4A	Kentucky River	Lincoln	0.00	4.10	37.51258	-84.74701	37.46085	-84.74615	2020
KY-1470	KY500540_01	Rename			Phillips Creek 0.0 to 5.5	Mouth to UT	River/Stream	500540	5.50	MILES	2020	4A	Licking River	Campbell	0.00	5.50	38.81703	-84.44383	38.85530	-84.41449	2020
KY-2460	KY514530_01	Rename			Phillips Fork 0.0 to 3.4	Mouth to Rocky Point Branch (change in land use)	River/Stream	514530	3.40	MILES	2016	2	Kentucky River	Leslie, Clay	0.00	3.40	37.00498	-83.52720	36.96674	-83.50929	2020
KY-1471	KY500588_01	Rename			Pigeon Creek 0.0 to 3.5	Mouth to Elm Lick Creek	River/Stream	500588	3.50	MILES	2004	5	Green River	Ohio	0.00	3.50	37.41653	-86.84187	37.43205	-86.80682	2020
KY-1472	KY500593_01	Rename			Pigeon Roost Creek 1.55 to 2.0	Near Confluence with UT to Discharge	River/Stream	500593	0.45	MILES	2010	3	Little Sandy River	Boyd	1.55	2.00	38.29218	-82.76919	38.28919	-82.77665	2020
KY-1473	KY500604_01	Rename			Pigeonroost Creek 0.0 to 3.85	Mouth to UT @ Pat Duffy Hollow	River/Stream	500604	3.85	MILES	2004	5	Tradewater River	Crittenden	0.00	3.85	37.42859	-87.93856	37.39720	-87.96295	2020
KY-1474	KY500606_01	Rename			Pigeonroost Fork 0.0 to 1.3	Mouth to Peter Cave Fork	River/Stream	500606	1.30	MILES	2004	5	Big Sandy River	Martin	0.00	1.30	37.78359	-82.44449	37.76882	-82.45038	2020
KY-1475	KY500606_02	Rename			Pigeonroost Fork 1.3 to 5.4	Petercave Fork to Caney Fork	River/Stream	500606	4.10	MILES	2016	5	Big Sandy River	Martin	1.30	5.40	37.76882	-82.45038	37.72380	-82.44087	2020
KY-1476	KY500639_01	Rename			Pilot Creek 0.7 to 2.55	Land use change to land use change	River/Stream	500639	1.85	MILES	2002	2	Upper Cumberland River	Lincoln	0.70	2.55	37.26895	-84.71014	37.27941	-84.68577	2020
KY-2461	KY514574_01	Rename			Pine Creek 0.0 to 5.1	Mouth to UT	River/Stream	514574	5.10	MILES	2012	2	Upper Cumberland River	Laurel	0.00	5.10	37.16325	-84.29294	37.13102	-84.23964	2020
KY-3244					Pine Mountain Settlement School Spring	Entire Springshed	Spring	90000087	151	ACRES	2020	3	Kentucky River	Harlan			36.94715	-83.18149	36.94683	-83.17122	2020
KY-1480	KY500729_02	Rename			Piney Creek 17.25 to 25.45	Butler Creek to Headwaters	River/Stream	500729	8.20	MILES	2020	5	Tradewater River	Crittenden	17.25	25.45	37.30578	-87.97384	37.30922	-88.06510	2020
KY-1477	KY500728_01	Rename			Piney Creek 4.5 to 10.2	Impoundment to Headwaters	River/Stream	500728	5.70	MILES	2020	2	Tradewater River	Christian, Caldwell	4.50	10.20	37.10557	-87.71041	37.04332	-87.68732	2020
KY-1479	KY500729_01	Rename			Piney Creek 9.15 to 16.15	Little Piney Creek to Buggs Branch	River/Stream	500729	7.00	MILES	2014	5	Tradewater River	Crittenden	9.15	16.15	37.33888	-87.92321	37.30234	-87.96264	2020
KY-1478	KY500728-7.0_01	Rename			Piney Creek UT 0.0 to 2.9	Mouth to Headwaters	River/Stream	500728	2.90	MILES	2020	3	Tradewater River	Caldwell	0.00	2.90	37.08002	-87.71065	37.05150	-87.72460	2020
KY-2920					Pirtle Spring	Entire Springshed	Spring	90000702	16981	ACRES	2020	3	Green River	Hardin			37.69619	-86.10861	37.67921	-85.99319	2020
KY-2464	KY514627_03	Rename			Pitman Creek 26.15 to 27.2	Smith Branch to Holtzclaw Branch	River/Stream	514627	1.05	MILES	2012	2	Upper Cumberland River	Pulaski	26.15	27.20	37.14875	-84.59463	37.16188	-84.59318	2020

KY-2462	KY514627_01	Rename			Pitman Creek 5.4 to 6.0	Lake Cumberland Backwaters to Somerset STP	River/Stream	514627	0.60	MILES	2012	5	Upper Cumberland River	Pulaski	5.40	6.00	37.04495	-84.59399	37.04433	-84.59664	2020
KY-2463	KY514627_02	Rename			Pitman Creek 6.05 to 26.2	0.05 miles above Sinking Creek to Smith Branch	River/Stream	514627	20.15	MILES	2020	2	Upper Cumberland River	Pulaski	6.05	26.20	37.04495	-84.59848	37.14875	-84.56463	2020
KY-1481	KY500832_01	Rename			Pleasant Grove Creek 0.0 to 2.3	Mouth to Headwaters/Spring	River/Stream	500832	2.30	MILES	2014	5	Green River	Logan	0.00	2.30	36.69281	-86.92083	36.71233	-86.90518	2020
KY-3165					Pleasant Hill Branch 0.9 to 2.95	Rough River Lake Backwaters to Headwaters	River/Stream	500839	2.05	MILES	2020	4C	Green River	Breckinridge	0.90	2.95	37.59021	-86.39641	37.56221	-86.42302	2020
KY-1482	KY500905_01	Rename			Pleasant Run 0.0 to 2.15	Mouth to UT to Pleasant Run	River/Stream	500905	2.15	MILES	2014	5	Lower Cumberland River	Todd	0.00	2.15	36.73354	-86.83253	36.75041	-86.81098	2020
KY-1483	KY500906_01	Rename			Pleasant Run 0.0 to 7.85	Mouth to Headwaters	River/Stream	500906	7.85	MILES	2016	5	Green River	Hopkins	0.00	7.85	37.19119	-87.42263	37.22046	-87.53590	2020
KY-3223					Pleasant Run 0.95 to 7.2	Lake Backwaters to Headwaters	River/Stream	514650	6.25	MILES	2020	4C	Licking River	Morgan	0.95	7.20	37.97665	-83.33918	38.01569	-83.31770	2020
KY-1493	KY500907_01	Rename			Pleasant Run 4.2 to 6.9	Mill Creek to Logan Branch	River/Stream	500907	2.70	MILES	2020	5	Salt River	Washington	4.20	6.90	37.67012	-85.16257	37.63932	-85.16840	2020
KY-1494	KY500913_01	Rename			Pleasant Run Creek 0.1 to 3.35	Ohio River Backwaters to Headwaters	River/Stream	500913	3.25	MILES	2004	2	Ohio River	Kenton	0.10	3.35	39.05548	-84.56041	39.04443	-84.55964	2020
KY-1491	KY500906-6.55_01	Rename			Pleasant Run UT 0.0 to 0.3	Mouth to Headwaters	River/Stream	500906	0.30	MILES	2016	5	Green River	Hopkins	0.00	0.30	37.20440	-87.52419	37.20269	-87.52861	2020
KY-1492	KY500906-6.6_01	Rename			Pleasant Run UT 0.0 to 0.5	Mouth to Headwaters	River/Stream	500906	0.50	MILES	2016	5	Green River	Hopkins	0.00	0.50	37.20486	-87.52488	37.21036	-87.52566	2020
KY-1488	KY500906-4.0_01	Rename			Pleasant Run UT 0.0 to 1.0	Mouth to Headwaters	River/Stream	500906	1.00	MILES	2016	5	Green River	Hopkins	0.00	1.00	37.19278	-87.49170	37.20529	-87.48819	2020
KY-1489	KY500906-5.35_01	Rename			Pleasant Run UT 0.0 to 1.0	Mouth to Headwaters	River/Stream	500906	1.00	MILES	2016	5	Green River	Hopkins	0.00	1.00	37.19729	-87.50860	37.20806	-87.50906	2020
KY-1490	KY500906-5.7_01	Rename			Pleasant Run UT 0.0 to 1.2	Mouth to Headwaters	River/Stream	500906	1.20	MILES	2016	5	Green River	Hopkins	0.00	1.20	37.19895	-87.51350	37.21479	-87.51650	2020
KY-1487	KY500906-1.5_01	Rename			Pleasant Run UT 0.0 to 1.65	Mouth to Headwaters	River/Stream	500906	1.65	MILES	2016	5	Green River	Hopkins	0.00	1.65	37.19376	-87.45937	37.20346	-87.47923	2020
KY-1485	KY500906-1.8_01	Rename			Pleasant Run UT 0.0 to 1.75	Pleasant Run to Headwaters	River/Stream	500906	1.75	MILES	2016	5	Green River	Hopkins	0.00	1.75	37.19286	-87.45426	37.20734	-87.45044	2020
KY-1486	KY500906-1.35_01	Rename			Pleasant Run UT 0.0 to 3.4	Mouth to Headwaters	River/Stream	500906	3.40	MILES	2016	5	Green River	Hopkins	0.00	3.40	37.19321	-87.45525	37.22488	-87.48504	2020
KY-1484	KY500906-0.15-1.8_01	Rename			Pleasant Run UT of UT 0.0 to 0.35	Mouth to Headwaters	River/Stream	500906	0.35	MILES	2016	5	Green River	Hopkins	0.00	0.35	37.19472	-87.45480	37.19900	-87.45410	2020
KY-2465	KY514662_01	Rename			Plum Branch 0.0 to 4.05	Mouth to Headwaters	River/Stream	514662	4.05	MILES	2006	5	Kentucky River	Powell, Estill	0.00	4.05	37.84759	-83.96742	37.79979	-83.96560	2020
KY-1495	KY500964_01	Rename			Plum Creek 0.0 to 1.65	Mouth to UT of Plum Creek	River/Stream	500964	1.65	MILES	2016	5	Green River	Muhlenberg	0.00	1.65	37.23017	-87.04438	37.21322	-87.04378	2020
KY-1498	KY500965_01	Rename			Plum Creek 0.0 to 17.8	Mouth to Headwaters	River/Stream	500965	17.80	MILES	2020	2B	Salt River	Shelby, Spencer, Bullitt	0.00	17.80	38.01684	-85.44510	38.20691	-85.35783	2020
KY-1496	KY500964_02	Rename			Plum Creek 1.65 to 3.9	UT of Plum Creek to Headwaters	River/Stream	500964	2.25	MILES	2014	5	Green River	Muhlenberg	1.65	3.90	37.21322	-87.04378	37.08503	-87.03357	2020
KY-1497	KY500964-1.65_01	Rename			Plum Creek UT 0.0 to 2.45	Mouth to Headwaters	River/Stream	500964	2.45	MILES	2016	5	Green River	Muhlenberg	0.00	2.45	37.21322	-87.04378	37.18898	-87.06919	2020
KY-1499	KY500972_01	Rename			Plum Lick Creek 0.0 to 5.95	Mouth to Headwaters	River/Stream	500972	5.95	MILES	2012	5	Licking River	Bourbon, Montgomery	0.00	5.95	38.17761	-84.03130	38.14220	-84.07718	2020
KY-49	KY2567760_01	Rename			Plum Run 0.0 to 2.3	Mouth to Headwaters	River/Stream	2567760	2.30	MILES	2020	2	Salt River	Washington	0.00	2.30	37.85773	-85.12187	37.85101	-85.08581	2020
KY-1500	KY500988_01	Rename			Pogue Creek 0.0 to 4.9	Mouth to Headwaters	River/Stream	500988	4.90	MILES	2004	2	Tradewater River	Hopkins	0.00	4.90	37.32587	-87.56003	37.38662	-87.55088	2020
KY-1501	KY500988-1.0-0.1_01	Rename			Pogue Creek UT of UT 0.0 to 1.1	Mouth to Headwaters	River/Stream	500988	1.10	MILES	2014	5	Tradewater River	Hopkins	0.00	1.10	37.33941	-87.56487	37.34328	-87.54706	2020
KY-1502	KY500996_01	Rename			Pointer Creek 0.2 to 3.85	Lake Cumberland Impoundment to Little Pointer Creek	River/Stream	500996	3.65	MILES	2020	2	Upper Cumberland River	Pulaski	0.20	3.85	37.11799	-84.71746	37.14222	-84.76466	2020
KY-2466	KY514679_01	Rename			Polls Creek 0.0 to 5.35	Cutshin Creek to Headwaters	River/Stream	514679	5.35	MILES	2000	5	Kentucky River	Leslie	0.00	5.35	37.13504	-83.28191	37.11760	-83.20906	2020
KY-1517	KY501047_01	Rename			Pond Creek 0.0 to 1.5	Mouth to UT	River/Stream	501047	1.50	MILES	2002	5	Ohio River	Oldham	0.00	1.50	38.37450	-85.62802	38.38243	-85.61153	2020
KY-1514	KY501043_01	Rename			Pond Creek 0.0 to 5.75	Mouth to UT	River/Stream	501043	5.75	MILES	2004	5	Tradewater River	Hopkins	0.00	5.75	37.32841	-87.68066	37.36277	-87.60822	2020
KY-2467	KY514692_01	Rename			Pond Creek 0.0 to 6.3	Mouth to Dry Fork	River/Stream	514692	6.30	MILES	2008	5	Upper Cumberland River	Jackson	0.00	6.30	37.28469	-84.05635	37.31607	-83.96814	2020
KY-1515	KY501044_01	Rename			Pond Creek 0.0 to 9.7	Mouth to Pinson Fork	River/Stream	501044	9.70	MILES	2020	5	Big Sandy River	Pike	0.00	9.70	37.66400	-82.27168	37.56842	-82.26796	2020
KY-1504	KY501042_01	Rename			Pond Creek 0.05 to 4.1	Green River backwaters to Daniel Run	River/Stream	501042	4.05	MILES	2020	5	Green River	Muhlenberg	0.05	4.10	37.30055	-86.98803	37.27923	-87.04609	2020
KY-1507	KY501042_04	Rename			Pond Creek 10.9 to 13.5	Caney Creek to Bat East Creek	River/Stream	501042	2.60	MILES	2016	5	Green River	Muhlenberg	10.90	13.50	37.20962	-87.10736	37.17374	-87.10777	2020
KY-1508	KY501042_05	Rename			Pond Creek 13.5 to 17.3	Bat East Creek to Sandlick Creek	River/Stream	501042	3.80	MILES	2014	4A	Green River	Muhlenberg	13.50	17.30	37.17374	-87.10777	37.14957	-87.15390	2020
KY-1509	KY501042_06	Rename			Pond Creek 17.3 to 17.9	Sandlick Creek to Saltlick Creek	River/Stream	501042	0.60	MILES	2016	5	Green River	Muhlenberg	17.30	17.90	37.14957	-87.15390	37.14551	-87.16335	2020
KY-1510	KY501042_07	Rename			Pond Creek 17.9 to 21.2	Saltlick Creek to pond at headwaters	River/Stream	501042	3.30	MILES	2020	5	Green River	Muhlenberg	17.90	21.20	37.14551	-87.16335	37.16968	-87.20395	2020
KY-1505	KY501042_02	Rename			Pond Creek 4.1 to 6.7	Old Channel to Plum Creek	River/Stream	501042	2.60	MILES	2014	5	Green River	Muhlenberg	4.10	6.70	37.27862	-87.04630	37.24285	-87.05132	2020
KY-1516	KY501046_01	Rename			Pond Creek 5.2 to 8.1	Briar Creek to Crane Run	River/Stream	501046	2.90	MILES	2020	5	Salt River	Jefferson	5.20	8.10	38.04173	-85.88094	38.07124	-85.87279	2020
KY-1506	KY501042_03	Rename			Pond Creek 6.7 to 10.9	Plum Creek to Caney Creek	River/Stream	501042	4.20	MILES	2016	5	Green River	Muhlenberg	6.70	10.90	37.24285	-87.05132	37.20962	-87.10736	2020
KY-2469	KY514692-7.7_01	Rename			Pond Creek UT 0.0 to 0.2	Mouth to Jackson County Regional Ind Park STP	River/Stream	514692	0.20	MILES	2002	3	Upper Cumberland River	Jackson	0.00	0.20	37.32477	-83.94928	37.32696	-83.95163	2020
KY-2468	KY514692-6.0_01	Rename			Pond Creek UT 0.0 to 0.25	Mouth to Sample Point	River/Stream	514692	0.25	MILES	2002	3	Upper Cumberland River	Jackson	0.00	0.25	37.31576	-83.97160	37.31922	-83.97205	2020
KY-1518	KY501047-1.7_01	Rename			Pond Creek UT 0.0 to 0.5	Mouth to River Bluff Sub	River/Stream	501047	0.50	MILES	2002	5	Ohio River	Oldham	0.00	0.50	38.38243	-85.61153	38.37769	-85.60634	2020
KY-1503	KY501040-4.3_01	Rename			Pond Creek UT 0.0 to 1.15	Mouth to Discharge	River/Stream	501040	1.15	MILES	2012	3	Licking River	Campbell	0.00	1.15	38.92589	-84.40039	38.93652	-84.39399	2020
KY-1511	KY501042-11.1_01	Rename			Pond Creek UT 0.0 to 1.5	Mouth to confluence of two unnamed tributaries (where UT goes from third to second order stream)	River/Stream	501042	1.50	MILES	2016	5	Green River	Muhlenberg	0.00	1.50	37.21579	-87.09846	37.23170	-87.11642	2020
KY-1512	KY501042-6.9_01	Rename			Pond Creek UT 0.0 to 2.4	Mouth to an UT flowing from the West	River/Stream	501042	2.40	MILES	2014	5	Green River	Muhlenberg	0.00	2.40	37.25191	-87.05228	37.24528	-87.08883	2020
KY-1519	KY501047-1.7_02	Rename			Pond Creek UT 0.5 to 1.0	River Bluff Sub to Headwaters	River/Stream	501047	0.50	MILES	2002	2	Ohio River	Oldham	0.50	1.00	38.37769	-85.60634	38.37218	-85.60065	2020
KY-1513	KY501042-6.9_02	Rename			Pond Creek UT 2.4 to 4.2	Mouth at UT of Pond Creek to Headwaters	River/Stream	501042	1.80	MILES	2016	5	Green River	Muhlenberg	2.40	4.20	37.24528	-87.08883	37.26267	-87.11090	2020
KY-1520	KY501049_01	Rename			Pond Drain 0.0 to 2.3	Mouth to UT	River/Stream	501049	2.30	MILES	2004	5	Green River	McLean	0.00	2.30	37.48793	-87.28370	37.45938	-87.26711	2020
KY-2470	KY514696_01	Rename			Pond Lick Branch 0.0 to 1.7	Mouth to Forested Reach	River/Stream	514696	1.70	MILES	2016	4A	Licking River	Rowan	0.00	1.70	38.24121	-83.44575	38.25581	-83.46599	2020
KY-1521	KY501053_01	Rename			Pond River 0.0 to 1.05	Mouth to Cypress Creek	River/Stream	501053	1.05	MILES	2004	2	Green River	Hopkins, McLean	0.00	1.05	37.52791	-87.35453	37.51404	-87.35003	2020
KY-1522	KY501053_02	Rename			Pond River 1.05 to 20.8	Cypress Creek to approx. 0.2 river miles downstream Earle Creek confluence	River/Stream	501053	19.75	MILES	2020	5	Green River	Muhlenberg, McLean, Hopkins	1.05	20.80	37.51404	-87.35003	37.33823	-87.33474	2020
KY-1523	KY501053_03	Rename			Pond River 20.8 to 31.2	Approx. 0.2 river miles downstream Earle Creek confluence to Flat Creek	River/Stream	501053	10.40	MILES	1998	5	Green River	Muhlenberg, Hopkins	20.80	31.20	37.63367	-87.33727	37.29429	-87.38337	2020
KY-1524	KY501053_04	Rename			Pond River 57.7 to 61.2	West Fork of Pond River to Coal Creek and Long Creek	River/Stream	501053	3.50	MILES	2020	5	Green River	Muhlenberg, Christian	57.70	61.20	37.15717	-87.33365	37.11459	-87.31291	2020
KY-1525	KY501053_05	Rename			Pond River 61.2 to 71.4	Coal Creek to Buck Fork	River/Stream	501053	10.20	MILES	2004	5	Green River	Muhlenberg, Christian, Todd	61.20	71.40	37.11459	-87.31291	37.04832	-87.25107	2020
KY-1526	KY501057_01	Rename			Pond Run 0.0 to 6.75	Mouth to Headwaters	River/Stream	501057	6.75	MILES	2014	4A	Green River	Ohio, Breckinridge	0.00	6.75	37.56436	-86.59281	37.63258	-86.64314	2020
KY-1527	KY501057-2.5_01	Rename			Pond Run UT 0.0 to 0.8	Mouth to Headwaters	River/Stream	501057	0.80	MILES	2002	2	Green River	Ohio	0.00	0.80	37.58488	-86.61880	37.59076	-86.63078	2020
KY-3013		Split	KY-2471	KY514707_01	Poor Fork Cumberland River 0.0 to 1.2	Mouth to 1 Mile Upstream of Harlan Municipal Water Works	River/Stream	514707	1.20	MILES	2020	2C	Upper Cumberland River	Harlan	0.00	1.20	36.85895	-83.32618	36.86993	-83.31410	2020
KY-3012		Split	KY-2471	KY514707_01	Poor Fork Cumberland River 1.2 to 14.9	1 Mile upstream of Harlan Municipal Water Works to Chumney Branch	River/Stream	514707	13.70	MILES	2020	5	Upper Cumberland River	Harlan	1.20	14.90	36.86993	-83.31410	36.94012	-83.13156	2020
KY-2472	KY514707_02	Rename			Poor Fork Cumberland River 14.9 to 16.3	Chumney Branch to 0.1 Miles above Totz	River/Stream	514707	1.40	MILES	2012	5	Upper Cumberland River	Harlan	14.90	16.30	36.94012	-83.13156	36.94672	-83.10989	2020
KY-3113		Split	KY-2473	KY514707_03	Poor Fork Cumberland River 16.3 to 25.0	Riparian Zone above Totz, KY to Cumberland Water Works	River/Stream	514707	8.70	MILES	2020	4A	Upper Cumberland River	Harlan	16.30	25.00	36.94672	-83.10989	36.97971	-82.98738	2020
KY-3114		Split	KY-2473	KY514707_03	Poor Fork Cumberland River 25.0 to 26.0	Cumberland Water Works to 1 mile upstream	River/Stream	514707	1.00	MILES	2020	4A	Upper Cumberland River	Harlan	25.00	26.00	36.97971	-82.98738	36.98372	-82.97173	2020
KY-3115		Split	KY-2473	KY514707_03	Poor Fork Cumberland River 26.0 to 31.85	1 Mile upstream of Cumberland Water Works to Lewis Creek	River/Stream	514707	5.85	MILES	2020	4A	Upper Cumberland River	Letcher, Harlan	26.00	31.85	36.98372	-82.97173	37.00454	-82.90089	2020
KY-2474	KY514707_04	Rename			Poor Fork Cumberland River 41.4 to 51.75	Franks Creek to Headwaters	River/Stream	514707	10.35	MILES	2012	2	Upper Cumberland River	Letcher	41.40	51.75	37.05547	-82.80558	37.11281	-82.72871	2020
KY-2947					Poor Fork Cumberland River UT 1.15 to 1.2	Kingdom Come State Park Intake to Headwaters	River/Stream	514707	0.05	MILES	2020	3	Upper Cumberland River	Harlan	1.15	1.20	36.99007	-82.98658	36.99009	-82.98557	2020
KY-1528	KY501089_01	Rename			Pope Lick 0.0 to 2.1	Mouth to UT	River/Stream	501089	2.10	MILES	2012	4A	Salt River	Jefferson	0.00	2.10	38.18813	-85.48556	38.20633	-85.50236	2020
KY-1529	KY501089_02	Rename			Pope Lick 2.1 to 5.6	UT to Riggs Lake to Headwaters	River/Stream	501089	3.50	MILES	2012	4A	Salt River	Jefferson	2.10	5.60	38.20633	-85.50236	38.24025	-85.51455	2020
KY-1530	KY501096_01	Rename			Poplar Creek 0.0 to 1.2	Mouth to confluence of Poorhouse and Harper Branch	River/Stream	501096	1.20	MILES	2010	4A	Licking River	Fleming	0.00	1.20	38.39297	-83.85669	38.40709	-83.85995	2020
KY-2475	KY514710_01	Rename			Poplar Creek 4.7 to 5.85	Buffalo Creek to point of discharge	River/Stream	514710	1.15	MILES	2012	3	Upper Cumberland River	Whitley	4.70	5.85	36.73191	-83.98574	36.72533	-83.97918	2020
KY-1531	KY501108_01	Rename			Poplar Grove Branch 0.0 to 3.4	Mouth to Headwaters	River/Stream	501108	3.40	MILES	2004	4A	Green River	Green, Taylor	0.00	3.40	37.42787	-85.57944	37.43634	-85.53317	2020
KY-1532	KY501199_01	Rename			Potter Fork 0.0 to 4.3	North Fork Kentucky River to Headwaters	River/Stream	501199	4.30	MILES	2000	5	Kentucky River	Letcher	0.00	4.30	37.17915	-82.71587	37.19284	-82.65663	2020
KY-1533	KY501208_01	Rename			Pottinger Creek 0.0 to 4.4	Mouth to Monks Creek	River/Stream	501208	4.40	MILES	2002	2	Salt River	Nelson	0.00	4.40	37.63834	-85.57308	37.63864	-85.52373	2020
KY-2476	KY514748_01	Rename			Powder Mill Creek 0.0 to 4.95	Mouth to Headwaters	River/Stream	514748	4.95	MILES	2016	5	Upper Cumberland River	Laurel	0.00	4.95	37.09914	-84.15910	37.14967	-84.15087	2020
KY-2477	KY514748-3.55_01	Rename			Powder Mill Creek UT 0.0 to 1.1	Mouth to Headwaters	River/Stream	514748	1.10	MILES	2012	5	Upper Cumberland River	Laurel	0.00	1.10	37.13319	-84.15507	37.14537	-84.16348	2020
KY-1534	KY501232_01	Rename			Powderlick Branch 0.0 to 3.5	Mouth to Buck Lick Branch	River/Stream	501232	3.50	MILES	2006	2	Licking River	Lewis	0.00	3.50	38.49764	-83.60043	38.49652	-83.56277	2020
KY-1535	KY501253_01	Rename			Powers Branch 0.0 to 1.4	Mouth to Headwaters	River/Stream	501253	1.40	MILES	2012	2	Upper Cumberland River	Knox	0.00	1.40	36.77559	-83.92601	36.78885	-83.90834	2020
KY-1536	KY501276_01	Rename			Prater Creek 0.0 to 4.85	Mouth to Spurlock Fork	River/Stream	501276	4.85	MILES	2004	2	Big Sandy River	Floyd	0.00	4.85	37.60276	-82.69319	37.55233	-82.69072	2020
KY-1537	KY501283_01	Rename			Prather Creek 0.0 to 4.25	Mouth to Headwaters	River/Stream	501283	4.25	MILES	2010	2	Salt River	Washington	0.00	4.25	37.69717	-85.10840	37.67990	-85.04847	2020
KY-1538	KY501293_01	Rename			Presley House Branch 0.0 to 1.5	Mouth to Headwaters	River/Stream	501293	1.50	MILES	2020	2	Upper Cumberland River	Letcher	0.00	1.50	37.06429	-82.79063	37.08212	-82.78732	2020
KY-1539	KY501294_01	Rename			Press Howard Fork 1.3 to 3.65	Steer Fork to Headwaters	River/Stream	501294	2.35	MILES	2016	2	Kentucky River	Breathitt	1.30	3.65	37.54612	-83.23551	37.54607	-83.19963	2020
KY-1540	KY501310_01	Rename			Pretty Run 0.0 to 8.1	Mouth to Headwaters	River/Stream	501310	8.10	MILES	2020	5	Licking River	Bourbon, Clark	0.00	8.10	38.11673	-84.16064	38.02740	-84.14313	2020
KY-3224					Price Creek UT 0.0 to 2.4	Mouth to Headwaters	River/Stream	501322	2.40	MILES	2020	4C	Salt River	Nelson	0.00	2.40	37.69687	-85.57943	37.72639	-85.58061	2020
KY-2478	KY514770_01	Rename			Prickly Ash Creek 0.0 to 3.3	Mouth to UT	River/Stream	514770	3.30	MILES	2000	5	Licking River	Bath	0.00	3.30	38.16262	-83.72144	38.15676	-83.77533	2020
KY-1541	KY501381_00	Rename			Providence City Lake New/South	Entire Reservoir	Lake/Reservoir	501381	46	ACRES	2020	2	Tradewater River	Webster			37.37603	-87.79689	37.37042	-87.79845	2020
KY-1542	KY501399_01	Rename			Pryor Branch 0.0 to 2.9	Mouth to UT	River/Stream	501399	2.90	MILES	2000	2	Tennessee River	Graves	0.00	2.90	36.78158	-88.52913	36.76158	-88.56726	2020
KY-1543	KY501406_01	Rename			Pryors Fork 0.0 to 5.4	Mouth to Land Use Change (Agriculture)	River/Stream	501406	5.40	MILES	2010	2	Ohio River	Trimble	0.00	5.40	38.63690	-85.40236	38.64269	-85.33447	2020
KY-1544	KY501413_01	Rename			Puckett Creek 0.0 to 10.0	Mouth to Rockhouse Branch	River/Stream	501413	10.00	MILES	2006	4A	Upper Cumberland River	Bell, Harlan	0.00	10.00	36.78714	-83.52511	36.73128	-83.39931	2020
KY-2680	KY90001853_00	Rename			Puckett Spring	Entire Springshed of Puckett Spring	Spring	90001853	10089	ACRES	2020	3	Lower Cumberland River	Livingston, Crittenden			37.23441	-88.20046	37.31282	-88.18254	2020
KY-1545	KY501437_01	Rename			Puncheon Branch 0.0 to 3.65	Mouth to Headwaters	River/Stream	501437	3.65	MILES	2010	5	Big Sandy River	Knott	0.00	3.65	37.31331	-82.79135	37.26661	-82.78466	2020
KY-1547	KY501442_01	Rename			Puncheon Camp Creek 0.0 to 1.25	Mouth to Jake Fork Confluence	River/Stream	501442	1.25	MILES	2020	4A	Licking River	Magoffin	0.00	1.25	37.64769	-83.00004	37.64583	-82.98323	2020
KY-1546	KY501441_01	Rename			Puncheon Camp Creek 0.0 to 3.6	Mouth to Headwaters	River/Stream	501441	3.60	MILES	2000	5	Kentucky River	Breathitt	0.00	3.60	37.50600	-83.50543	37.52310	-83.45719	2020
KY-1548	KY501447_01	Rename			Puncheon Creek 0.0 to 3.8	Mouth to KY/TN State Line	River/Stream	501447	3.80	MILES	2004	2	Green River	Allen	0.00	3.80	36.67505	-85.99476	36.62941	-86.00539	2020
KY-2479	KY514797_01	Rename			Puncheoncamp Branch 0.0 to 1.8	Mouth to Headwaters	River/Stream	514797	1.80	MILES	2020	2	Upper Cumberland River	McCreary	0.00	1.80	36.65874	-84.64042	36.63582	-84.65050	2020
KY-1549	KY501457_01	Rename			Pup Creek 2.3 to 6.7	Davies County Sand and Gravel to Allgood Ditch	River/Stream	501457	4.40	MILES	2008	2	Ohio River	Daviess	2.30	6.70	37.83548	-87.02188	37.84156	-86.97704	2020
KY-1550	KY501481_01	Rename			Quicksand Creek 0.0 to 17.0	Mouth to Hunting Creek	River/Stream	501481	17.00	MILES	2016	5	Kentucky River	Breathitt	0.00	17.00	37.53442	-83.34914	37.59237	-83.22805	2020
KY-1551	KY501481_02	Rename			Quicksand Creek 21.7 to 30.8	Big Caney Creek to Spring Fork	River/Stream	501481	9.10	MILES	2006	5	Kentucky River	Breathitt	21.70	30.80	37.58564	-83.19567	37.56614	-83.13254	2020
KY-1552	KY501505_01	Rename			Raccoon Creek 0.0 to 2.1	Mouth to Discharge	River/Stream	501505	2.10	MILES	2010	3	Big Sandy River	Pike	0.00	2.10	37.56098	-82.46545	37.54564	-82.46590	2020
KY-2480	KY514818_01	Rename			Raccoon Creek 0.0 to 2.7	Mouth to Slate creek	River/Stream	514818	2.70	MILES	2000	5	Upper Cumberland River	Laurel	0.00	2.70	37.23450	-84.01380	37.20414	-84.01721	2020
KY-1554	KY501506_01	Rename			Raccoon Creek 0.0 to 5.05	Little Sandy River to Headwaters	River/Stream	501506	5.05	MILES	2010	5	Little Sandy River	Greenup	0.00	5.05	38.53036	-82.87046	38.50531	-82.93435	2020
KY-2481	KY514819_01	Rename			Raccoon Creek 0.0 to 5.1	Mouth to Headwaters	River/Stream	514819	5.10	MILES	2020	2	Upper Cumberland River	Jackson	0.00	5.10	37.37328	-84.11095	37.42285	-84.07264	2020
KY-1553	KY501505_02	Rename			Raccoon Creek 5.7 to 7.55	Frozen creek to Fiftyeight Branch	River/Stream	501505	1.85	MILES	2004	5	Big Sandy River	Pike	5.70	7.55	37.50404	-82.44947	37.48556	-82.43072	2020
KY-1555	KY501540_01	Rename			Raleigh Fork 0.0 to 1.05	Mouth to Headwaters	River/Stream	501540	1.05	MILES	2008	5	Upper Cumberland River	Letcher	0.00	1.05	36.99925	-82.85715	36.98463	-82.86048	2020
KY-3226					Rattlesnake Branch 0.0 to 3.05	Mouth to pond at headwaters	River/Stream	501592	3.05	MILES	2020	4C	Salt River	Shelby	0.00	3.05	38.07853	-85.14842	38.09324	-85.09961	2020
KY-1556	KY501593_01	Rename			Rattlesnake Creek 0.0 to 1.2	Mouth to UT	River/Stream	501593	1.20	MILES	2000	5	Kentucky River	Grant	0.00	1.20	38.63077	-84.71067	38.62740	-84.69212	2020
KY-1557	KY501604_01	Rename			Raven Creek 0.0 to 5.55	Mouth to South and Middle Fork of Raven Creek	River/Stream	501604	5.55	MILES	2006	2	Licking River	Harrison	0.00	5.55	38.51483	-84.39123	38.48335	-84.43290	2020
KY-2482	KY514860_01	Rename			Red Bird Creek 0.0 to 6.25	Mouth to Cow Fork (change in land use)	River/Stream	514860	6.25	MILES	2016	2	Kentucky River	Bell, Clay	0.00	6.25	37.00498	-83.52720	36.92998	-83.53352	2020
KY-2483	KY514862_01	Rename			Red Bird River 0.0 to 15.3	Mouth to Big Creek	River/Stream	514862	15.30	MILES	2016	5	Kentucky River	Clay	0.00	15.30	37.26983	-83.64346	37.16649	-83.58234	2020
KY-2484	KY514862_02	Rename			Red Bird River 15.3 to 32.9	Big Creek to Upper Bear Creek (Change in Land Use)	River/Stream	514862	17.60	MILES	2016	2	Kentucky River	Leslie, Clay	15.30	32.90	37.16649	-83.58234	37.02109	-83.53423	2020
KY-2062	KY510193_01	Rename			Red Lick Creek 0.0 to 5.0	Mouth to Horns River	River/Stream	510193	5.00	MILES	2016	4A	Kentucky River	Estill	0.00	5.00	37.63773	-83.97989	37.60225	-84.03333	2020
KY-2485	KY514872_01	Rename			Red River 21.85 to 30.8	Brush Creek to Judy Creek	River/Stream	514872	8.95	MILES	2016	5	Kentucky River	Powell	21.85	30.80	37.85923	-83.93290	37.86109	-83.87160	2020
KY-2486	KY514872_02	Rename			Red River 31.1 to 32.1	Point of Withdrawal to 1 Mile Upstream	River/Stream	514872	1.00	MILES	2016	2	Kentucky River	Powell	31.10	32.10	37.86395	-83.86855	37.86271	-83.85552	2020
KY-2782		Split	KY-2487	KY514872_03	Red River 50.6 to 51.6	Confluence With Indian Creek/Change in Land Use to Schoolhouse Branch	River/Stream	514872	1.00	MILES	2020	2	Kentucky River	Powell	50.60	51.60	37.84771	-83.68781	37.84422	-83.67583	2020
KY-1559	KY501672_01	Rename			Red River 50.9 to 54.5	KY/TN State Line to Whippoorwill Creek	River/Stream	501672	3.60	MILES	2020	5	Lower Cumberland River	Logan	50.90	54.50	36.64533	-86.97492	36.66542	-86.96358	2020
KY-2783		Split	KY-2487	KY514872_03	Red River 51.6 to 61.45	Schoolhouse Branch to Confluence with Swift Camp Creek	River/Stream	514872	9.85	MILES	2016	2	Kentucky River	Wolfe, Menifee, Powell	51.60	61.45	37.84422	-83.67583	37.82022	-83.57358	2020
KY-1560	KY501672_02	Rename			Red River 54.5 to 56.90	Whippoorwill Creek to South Fork Red River	River/Stream	501672	2.40	MILES	2014	5	Lower Cumberland River	Logan	54.50	56.90	36.66542	-86.96358	36.67284	-86.93134	2020
KY-1561	KY501672_03	Rename			Red River 56.9 to 65.75	South Fork of Red River to Little Whippoorwill Creek	River/Stream	501672	8.85	MILES	2020	5	Lower Cumberland River	Logan	56.90	65.75	36.67284	-86.93134	36.69944	-86.85319	2020
KY-2812					Red River 61.45 to 64.65	Confluence with Swift Camp Creek to Sarges Branch	River/Stream	514872	3.20	MILES	2020	3	Kentucky River	Wolfe	61.45	64.65	37.82022	-83.57358	37.80578	-83.54558	2020
KY-2488	KY514872_04	Rename			Red River 64.65 to 68.25	Sarges Branch to Stillwater Creek	River/Stream	514872	3.60	MILES	2020	5	Kentucky River	Wolfe	64.65	68.25	37.80578	-83.54558	37.79463	-83.51325	2020
KY-1562	KY501672_04	Rename			Red River 65.75 to 74.3	Little Whippoorwill Creek to Sulphur Spring Creek	River/Stream	501672	8.55	MILES	2020	2	Lower Cumberland River	Simpson, Logan	65.75	74.30	36.69944	-86.85319	36.69043	-86.74799	2020
KY-2852		Split	KY-2489	KY514872_05	Red River 68.25 to 70.95	Stillwater Creek to KY-746	River/Stream	514872	2.70	MILES	2020	4C	Kentucky River	Wolfe	68.25	70.95	37.79463	-83.51325	37.79876	-83.48939	2020
KY-2853		Split	KY-2489	KY514872_05	Red River 70.95 to 84.8	KY-746 to Forested Riparian Zone	River/Stream	514872	13.85	MILES	2004	5	Kentucky River	Wolfe	70.95	84.80	37.79871	-83.48947	37.78918	-83.36746	2020
KY-1563	KY501672_05	Rename			Red River 74.3 to 81.3	Sulphur Spring Creek to KY/TN State Line	River/Stream	501672	7.00	MILES	2014	5	Lower Cumberland River	Simpson	74.30	81.30	36.69043	-86.74799	36.65028	-86.67891	2020
KY-2490	KY514872_06	Rename			Red River 90.6 to 94.85	Rose Fork to Banks Fork	River/Stream	514872	4.25	MILES	2006	5	Kentucky River	Wolfe	90.60	94.85	37.73771	-83.33331	37.71188	-83.28691	2020
KY-1564	KY501706_01	Rename			Reeves Branch 0.0 to 0.3	Mouth/land use to UTs	River/Stream	501706	0.30	MILES	2002	5	Mississippi River	Graves	0.00	0.30	36.87424	-88.48737	36.87169	-88.48469	2020
KY-1565	KY501712_00	Rename			Reformatory Lake	Entire Reservoir	Lake/Reservoir	501712	58	ACRES	2020	2	Ohio River	Oldham			38.40101	-85.43888	38.39587	-85.42842	2020
KY-3227					Reins Lick Creek 0.0 to 7.9	Mouth (at stream sink) to Headwaters	River/Stream	501721	7.90	MILES	2020	4C	Lower Cumberland River	Todd	0.00	7.90	36.74538	-87.26836	36.78928	-87.19266	2020
KY-1566	KY501725_01	Rename			Render Creek 0.0 to 3.7	Mouth to Headwaters	River/Stream	501725	3.70	MILES	2006	5	Green River	Ohio	0.00	3.70	37.35019	-86.94542	37.39151	-86.91421	2020
KY-2491	KY514888_01	Rename			Renfro Creek 0.0 to 3.1	Mouth to Lake Linville Dam	River/Stream	514888	3.10	MILES	2010	5	Upper Cumberland River	Rockcastle	0.00	3.10	37.38280	-84.29160	37.38290	-84.33515	2020
KY-2917					Reservoir #1 (aka New Lake)	Entire Reservoir	Lake/Reservoir	400233	6	ACRES	2020	3	Kentucky River	Garrard			37.60679	-84.59523	37.60948	-84.59687	2020
KY-1569	KY501760_01	Rename			Rhodes Creek 0.0 to 1.9	Mouth to UT	River/Stream	501760	1.90	MILES	2004	5	Green River	Daviess	0.00	1.90	37.77348	-87.27930	37.76053	-87.25043	2020
KY-1567	KY501759_01	Rename			Rhodes Creek 0.0 to 2.2	Mouth to Ford Ditch	River/Stream	501759	2.20	MILES	2002	5	Green River	Daviess	0.00	2.20	37.68836	-87.13961	37.65970	-87.14173	2020
KY-1568	KY501759_02	Rename			Rhodes Creek 2.2 to 7.45	Ford Ditch to UT	River/Stream	501759	5.25	MILES	2002	5	Green River	Daviess	2.20	7.45	37.65970	-87.14173	37.59639	-87.15981	2020
KY-1570	KY501785_01	Rename			Rich Creek 1.4 to 3.7	Above Yatesville Lake backwaters to Below Braided Channel	River/Stream	501785	2.30	MILES	2016	5	Big Sandy River	Lawrence	1.40	3.70	38.05819	-82.74435	38.04046	-82.76599	2020
KY-1574	KY501823_01	Rename			Richland Creek 0.0 to 0.85	Mouth to UT	River/Stream	501823	0.85	MILES	2000	5	Kentucky River	Owen	0.00	0.85	38.50736	-84.69657	38.51008	-84.70267	2020
KY-1573	KY501821_01	Rename			Richland Creek 0.0 to 4.5	Mouth to Copper Creek	River/Stream	501821	4.50	MILES	2004	5	Tradewater River	Hopkins	0.00	4.50	37.29847	-87.60402	37.23830	-87.58950	2020
KY-2492	KY514915_01	Rename			Richland Creek 0.0 to 6.4	Mouth to Middle Fork Richland Creek	River/Stream	514915	6.40	MILES	2020	5	Upper Cumberland River	Knox	0.00	6.40	36.85882	-83.89135	36.91177	-83.90429	2020
KY-1572	KY501820_01	Rename			Richland Creek 0.7 to 5.4	Hazel Creek to Ross and Sanders Branches	River/Stream	501820	4.70	MILES	2012	4A	Lower Cumberland River	Livingston	0.70	5.40	37.11566	-88.22287	37.08784	-88.25946	2020
KY-2494	KY514915_03	Rename			Richland Creek 11.55 to 21.3	Knox Fork to Headwaters	River/Stream	514915	9.75	MILES	2008	4A	Upper Cumberland River	Knox	11.55	21.30	36.96035	-83.89655	37.05039	-83.85863	2020
KY-2493	KY514915_02	Rename			Richland Creek 6.4 to 11.55	Middle Fork Richland Creek to Knox Fork	River/Stream	514915	5.15	MILES	2012	4A	Upper Cumberland River	Knox	6.40	11.55	36.91177	-83.90429	36.96035	-83.89655	2020
KY-1571	KY501819-2.0_01	Rename			Richland Creek UT 0.0 to 1.7	Mouth to Headwaters	River/Stream	501819	1.70	MILES	2008	5	Green River	Butler	0.00	1.70	37.09768	-86.70781	37.11615	-86.72525	2020
KY-1575	KY501825_01	Rename			Richland Slough 0.0 to 3.9	Mouth to Heaynes Ditch	River/Stream	501825	3.90	MILES	2004	5	Green River	Henderson	0.00	3.90	37.81025	-87.35168	37.83660	-87.32976	2020
KY-1576	KY501838_01	Rename			Riddles Run 0.0 to 4.7	Mouth to Headwaters	River/Stream	501838	4.70	MILES	2016	5	Ohio River	Boone	0.00	4.70	38.93147	-84.79322	38.94340	-84.72331	2020
KY-1577	KY501863_01	Rename			Right Fork Beaver Creek 0.0 to 17.5	Mouth to Jones Fork	River/Stream	501863	17.50	MILES	2010	5	Big Sandy River	Floyd	0.00	17.50	37.55913	-82.75229	37.46693	-82.83151	2020
KY-1578	KY501863_02	Rename			Right Fork Beaver Creek 17.5 to 23.4	Jones Fork to Caney Fork	River/Stream	501863	5.90	MILES	2010	5	Big Sandy River	Floyd	17.50	23.40	37.46700	-82.83143	37.41737	-82.79738	2020
KY-1579	KY501863_03	Rename			Right Fork Beaver Creek 23.4 to 30.35	Caney Fork to Dry Creek	River/Stream	501863	6.95	MILES	2010	5	Big Sandy River	Knott	23.40	30.35	37.41737	-82.79738	37.35996	-82.78948	2020
KY-1580	KY501863_04	Rename			Right Fork Beaver Creek 30.35 to 33.55	Dry Creek to Mullins Branch	River/Stream	501863	3.20	MILES	2010	5	Big Sandy River	Knott	30.35	33.55	37.35996	-82.78948	37.33487	-82.81052	2020
KY-1581	KY501863_05	Rename			Right Fork Beaver Creek 33.55 to 38.05	Mullins Branch to Arnold Fork and Issac Fork	River/Stream	501863	4.50	MILES	2010	5	Big Sandy River	Knott	33.55	38.05	37.33487	-82.81052	37.29771	-82.76741	2020
KY-2495	KY514928_01	Rename			Right Fork Beehive Branch 0.55 to 2.05	Residential area to Headwaters	River/Stream	514928	1.50	MILES	2010	2	Kentucky River	Perry	0.55	2.05	37.06172	-83.10148	37.04624	-83.09557	2020
KY-2496	KY514930_01	Rename			Right Fork Big Double Creek 0.0 to 2.3	Mouth to Headwaters	River/Stream	514930	2.30	MILES	2006	2	Kentucky River	Clay	0.00	2.30	37.09053	-83.60245	37.09615	-83.63625	2020
KY-2497	KY514933_01	Rename			Right Fork Buffalo Creek 0.0 to 2.1	Mouth to Rattlesnake Creek	River/Stream	514933	2.10	MILES	2010	2	Kentucky River	Owsley	0.00	2.10	37.35164	-83.63574	37.33687	-83.61440	2020
KY-2498	KY514935_01	Rename			Right Fork Cane Creek 1.9 to 4.95	Confluence with Middle Fork Right Fork Cane Creek to Headwaters	River/Stream	514935	3.05	MILES	2010	4A	Kentucky River	Menifee, Powell	1.90	4.95	37.88034	-83.75854	37.91128	-83.74241	2020
KY-3228					Right Fork Cloverlick Creek 0.0 to 1.35	Mouth to Headwaters	River/Stream	501876	1.35	MILES	2020	2	Upper Cumberland River	Harlan	0.00	1.35	36.92485	-82.94671	36.90936	-82.93746	2020
KY-2499	KY514940_01	Rename			Right Fork Elisha Creek 0.0 to 3.55	Big Middle Fork Elisha Creek to Headwaters	River/Stream	514940	3.55	MILES	2006	2	Kentucky River	Leslie	0.00	3.55	37.08165	-83.51802	37.07869	-83.46688	2020
KY-1582	KY501892_01	Rename			Right Fork Island Creek 0.0 to 1.7	Mouth to Point of Discharge	River/Stream	501892	1.70	MILES	2010	3	Big Sandy River	Pike	0.00	1.70	37.45013	-82.54026	37.46030	-82.56510	2020
KY-1583	KY501894_01	Rename			Right Fork Lacey Creek 0.0 to 2.25	Mouth to headwaters	River/Stream	501894	2.25	MILES	2006	5	Kentucky River	Wolfe	0.00	2.25	37.78728	-83.42245	37.77878	-83.45172	2020
KY-1584	KY501899_01	Rename			Right Fork Licking River 3.2 to 4.75	Lick Branch to Puncheon Creek	River/Stream	501899	1.55	MILES	2010	5	Licking River	Magoffin	3.20	4.75	37.69962	-83.15028	37.69499	-83.16966	2020
KY-1585	KY501903_01	Rename			Right Fork Little Paint Creek 0.4 to 2.1	Davin Branch to Headwaters	River/Stream	501903	1.70	MILES	2010	5	Big Sandy River	Floyd	0.40	2.10	37.71764	-82.81539	37.71749	-82.84251	2020
KY-1586	KY501910_01	Rename			Right Fork Millstone Creek 0.0 to 1.7	Mouth to Headwaters	River/Stream	501910	1.70	MILES	2006	5	Kentucky River	Letcher	0.00	1.70	37.19889	-82.76200	37.22116	-82.76352	2020
KY-1587	KY501913_01	Rename			Right Fork Newcombe Creek 0.0 to 4.25	Mouth to Headwaters	River/Stream	501913	4.25	MILES	2004	5	Little Sandy River	Elliott	0.00	4.25	38.06120	-83.05223	38.01246	-83.04432	2020
KY-1588	KY501915_01	Rename			Right Fork Panther Fork 0.0 to 1.05	Mouth to Headwaters 0.0 to 1.05	River/Stream	501915	1.05	MILES	2010	5	Big Sandy River	Martin	0.00	1.05	37.73733	-82.57386	37.74962	-82.57873	2020
KY-1589	KY501938_01	Rename			Right Fork Whitecabin Branch 0.0 to 1.1	Mouth to Headwaters	River/Stream	501938	1.10	MILES	2010	5	Big Sandy River	Martin	0.00	1.10	37.75649	-82.50050	37.75836	-82.51856	2020
KY-1590	KY501946_01	Rename			Righthand Fork 0.0 to 2.25	Mouth to Headwaters	River/Stream	501946	2.25	MILES	2010	5	Big Sandy River	Knott	0.00	2.25	37.30977	-82.81601	37.29078	-82.83749	2020
KY-2921					Rio Verde Springs	Entire Springshed	Spring	90000115	3379	ACRES	2020	3	Green River	Hart			37.32466	-85.77136	37.38200	-85.77272	2020
KY-1591	KY502020_01	Rename			Road Fork 1.3 to 1.9	Next to Permitted Discharge to Point of Discharge	River/Stream	502020	0.60	MILES	2010	3	Big Sandy River	Pike	1.30	1.90	37.60559	-82.36647	37.59874	-82.37200	2020
KY-1592	KY502031_01	Rename			Road Run 0.0 to 7.15	Mouth to Pond	River/Stream	502031	7.15	MILES	2006	5	Salt River	Washington	0.00	7.15	37.74922	-85.26487	37.66555	-85.21031	2020
KY-1593	KY502039_01	Rename			Roaring Fork 0.0 to 1.05	Mouth to Headwaters	River/Stream	502039	1.05	MILES	2006	2	Kentucky River	Breathitt	0.00	1.05	37.46327	-83.17081	37.47459	-83.16571	2020
KY-2500	KY514992_01	Rename			Roaring Fork 0.0 to 3.65	Mouth to Headwaters	River/Stream	514992	3.65	MILES	2006	2	Upper Cumberland River	Knox	0.00	3.65	36.88210	-83.69228	36.87782	-83.64623	2020
KY-2501	KY514993_01	Rename			Roaring Paunch Creek 0.0 to 7.7	Mouth to Smith Fork	River/Stream	514993	7.70	MILES	2016	2	Upper Cumberland River	McCreary	0.00	7.70	36.68066	-84.54150	36.66118	-84.48878	2020
KY-2503	KY514993_03	Rename			Roaring Paunch Creek 15.6 to 15.75	Fox Branch to State Line	River/Stream	514993	0.15	MILES	2016	5	Upper Cumberland River	McCreary	15.60	15.75	36.59852	-84.45884	36.59840	-84.45844	2020
KY-2502	KY514993_02	Rename			Roaring Paunch Creek 7.7 to 15.6	Smith Fork to Fox Branch	River/Stream	514993	7.90	MILES	2016	2	Upper Cumberland River	McCreary	7.70	15.60	36.66118	-84.48878	36.59840	-84.45844	2020
KY-1594	KY502049_01	Rename			Rob Fork 0.0 to 0.7	Caney Creek to pond near headwaters	River/Stream	502049	0.70	MILES	2010	5	Big Sandy River	Pike	0.00	0.70	37.34480	-82.54692	37.34642	-82.53314	2020
KY-1597	KY502091_01	Rename			Robinson Creek 0.0 to 2.15	Mouth to Bear Fork	River/Stream	502091	2.15	MILES	2002	2	Big Sandy River	Pike	0.00	2.15	37.38616	-82.54374	37.38552	-82.57590	2020
KY-3166					Robinson Creek 11.95 to 13.85	Stoner Creek to Duton Creek	River/Stream	502090	1.90	MILES	2020	4C	Green River	Taylor	11.95	13.85	37.34187	-85.24713	37.34932	-85.21844	2020
KY-1596	KY502090_02	Rename			Robinson Creek 13.85 to 18.95	Duton Creek to Black Lick Creek	River/Stream	502090	5.10	MILES	2008	2	Green River	Taylor	13.85	18.95	37.34932	-85.21844	37.39574	-85.16900	2020
KY-2504	KY515013_01	Rename			Robinson Creek 6.4 to 9.6	Little Robinson Creek #1 (2nd order) to Little Robinson Creek #2 (3rd order)	River/Stream	515013	3.20	MILES	2002	2	Upper Cumberland River	Laurel	6.40	9.60	37.00235	-84.02279	37.02038	-83.99742	2020
KY-1595	KY502090_01	Rename			Robinson Creek 9.3 to 11.95	Green River Lake Backwaters to Stoner Creek	River/Stream	502090	2.65	MILES	2008	5	Green River	Taylor	9.30	11.95	37.32600	-85.27354	37.34187	-85.24713	2020
KY-3249					Robinson Creek UT 0.0 to 0.55	Green River Lake Backwaters to Wee Yan Branch Robinson Creek	River/Stream	502090	0.55	MILES	2020	4C	Green River	Taylor	0.00	0.55	37.31477	-85.29332	37.31909	-85.30066	2020
KY-2506	KY515024_01	Rename			Rock Creek 0.0 to 4.0	Mouth to White Oak Creek	River/Stream	515024	4.00	MILES	2020	2C	Upper Cumberland River	McCreary	0.00	4.00	36.71742	-84.54332	36.70301	-84.59604	2020
KY-2505	KY515022_01	Rename			Rock Creek 0.0 to 5.85	Mouth to Headwaters	River/Stream	515022	5.85	MILES	2002	2	Upper Cumberland River	McCreary	0.00	5.85	36.59545	-84.27001	36.61048	-84.34680	2020
KY-2728					Rock Creek 15.4 to 16.6	Upstream End of Private Land to Near Smith Cemetery	River/Stream	515024	1.20	MILES	2020	3	Upper Cumberland River	McCreary	15.40	16.60	36.65380	-84.69078	36.64821	-84.70494	2020
KY-2508	KY515024_03	Rename			Rock Creek 16.6 to 21.6	Near Smith Cemetery to KY/TN State Line	River/Stream	515024	5.00	MILES	2008	5	Upper Cumberland River	McCreary	16.60	21.60	36.64821	-84.70494	36.60241	-84.74000	2020
KY-2507	KY515024_02	Rename			Rock Creek 4.0 to 15.4	White Oak Bridge to Upstream End of Private Land	River/Stream	515024	11.40	MILES	2020	2	Upper Cumberland River	McCreary	4.00	15.40	36.70301	-84.59604	36.65380	-84.69078	2020
KY-2511	KY515024-9.35_01	Rename			Rock Creek UT 0.0 to 1.15	Mouth to Headwaters	River/Stream	515024	1.15	MILES	2002	2	Upper Cumberland River	McCreary	0.00	1.15	36.66422	-84.62918	36.65113	-84.61988	2020
KY-2509	KY515024-0.55_01	Rename			Rock Creek UT 0.0 to 1.3	Mouth to Headwaters	River/Stream	515024	1.30	MILES	2002	2	Upper Cumberland River	McCreary	0.00	1.30	36.71202	-84.55068	36.71866	-84.56983	2020
KY-2510	KY515024-17.1_01	Rename			Rock Creek UT 0.0 to 2.05	Mouth to Headwaters	River/Stream	515024	2.05	MILES	2002	2	Upper Cumberland River	McCreary	0.00	2.05	36.64455	-84.71119	36.62616	-84.69235	2020
KY-2512	KY515026_01	Rename			Rock Fork 0.0 to 4.0	Mouth to Island Fork	River/Stream	515026	4.00	MILES	2016	5	Licking River	Rowan	0.00	4.00	38.27835	-83.41291	38.31427	-83.44253	2020
KY-1598	KY502115_01	Rename			Rock Fork 0.0 to 7.0	Mouth to headwaters	River/Stream	502115	7.00	MILES	2010	5	Big Sandy River	Knott, Floyd	0.00	7.00	37.47939	-82.83492	37.42686	-82.91737	2020
KY-1599	KY502134_01	Rename			Rock Lick Creek 0.0 to 8.8	Mouth to UT	River/Stream	502134	8.80	MILES	2000	2	Upper Cumberland River	Pulaski, Casey	0.00	8.80	37.15926	-84.70921	37.24455	-84.78343	2020
KY-2513	KY515033_01	Rename			Rock Lick Creek 0.0 to 9.6	Mouth to Headwaters	River/Stream	515033	9.60	MILES	2010	2	Kentucky River	Jackson	0.00	9.60	37.53938	-84.01075	37.54763	-84.15052	2020
KY-1600	KY502144_01	Rename			Rock Run 0.0 to 5.55	Mouth to Headwaters	River/Stream	502144	5.55	MILES	2008	2	Ohio River	Lewis	0.00	5.55	38.54951	-83.24105	38.56261	-83.31858	2020
KY-2514	KY515037_01	Rename			Rockbridge Fork 0.0 to 3.35	Mouth to Headwaters	River/Stream	515037	3.35	MILES	2010	2	Kentucky River	Wolfe	0.00	3.35	37.76941	-83.56134	37.76863	-83.60046	2020
KY-1601	KY502158_01	Rename			Rockcastle Creek 0.0 to 3.75	Mouth to near Laurel Creek	River/Stream	502158	3.75	MILES	2016	5	Big Sandy River	Lawrence	0.00	3.75	38.00200	-82.51920	37.98359	-82.54402	2020
KY-1620	KY502158_03	Rename			Rockcastle Creek 13.4 to 17.8	Rockhouse Fork to Middle Fork Rockcastle River	River/Stream	502158	4.40	MILES	2004	5	Big Sandy River	Martin	13.40	17.80	37.91107	-82.55292	37.86739	-82.54178	2020
KY-1602	KY502158_02	Rename			Rockcastle Creek 3.7 to 13.4	Near Laurel Creek to Rockhouse Fork	River/Stream	502158	9.70	MILES	2004	5	Big Sandy River	Martin, Lawrence	3.70	13.40	37.98358	-82.54402	37.91107	-82.55292	2020
KY-2515	KY515038_01	Rename			Rockcastle River 17.15 to 32.0	Sinking Creek to Skegg Creek	River/Stream	515038	14.85	MILES	2020	5	Upper Cumberland River	Rockcastle, Laurel, Pulaski	17.15	32.00	37.10181	-84.28014	37.22237	-84.26725	2020
KY-2730					Rockcastle River 32.0 to 40.35	Skegg Creek to UT (historic significant mining)	River/Stream	515038	8.35	MILES	2020	3	Upper Cumberland River	Laurel, Rockcastle	32.00	40.35	37.22237	-84.26725	37.27169	-84.22153	2020
KY-2516	KY515038_03	Rename			Rockcastle River 40.35 to 52.9	UT (historic significant mining) to Horse Lick Creek	River/Stream	515038	12.55	MILES	2002	2	Upper Cumberland River	Laurel, Rockcastle	40.35	52.90	37.27169	-84.22153	37.31986	-84.13792	2020
KY-2731					Rockcastle River 52.9 to 54.7	Horse Lick Creek to Middle and South Fork Rockcastle River	River/Stream	515038	1.80	MILES	2020	3	Upper Cumberland River	Jackson, Laurel	52.90	54.70	37.31986	-84.13792	37.33577	-84.11906	2020
KY-2729					Rockcastle River 8.9 to 17.15	Lower End of The Narrows (0.25 River Miles Upstream of Cane Creek) to Sinking Creek	River/Stream	515038	8.25	MILES	2020	3	Upper Cumberland River	Laurel, Pulaski	8.90	17.15	37.03017	-84.30832	37.10181	-84.28014	2020
KY-3245					Rockcastle Spring	Entire Springshed	Spring	90001020	347	ACRES	2020	3	Upper Cumberland River	Rockcastle			37.45333	-84.23611	37.47316	-84.23057	2020
KY-1622	KY502192_01	Rename			Rockhouse Creek 0.0 to 3.65	Mouth to UT	River/Stream	502192	3.65	MILES	2020	5	Kentucky River	Letcher	0.00	3.65	37.14018	-82.97298	37.15385	-82.93443	2020
KY-1621	KY502188_01	Rename			Rockhouse Creek 0.0 to 4.95	Mouth to East Fork/West Fork of Rockhouse Creek	River/Stream	502188	4.95	MILES	2006	2	Tennessee River	Calloway	0.00	4.95	36.74878	-88.27653	36.70430	-88.31580	2020
KY-1623	KY502201_01	Rename			Rockhouse Fork 0.0 to 2.1	Daniels Fork to Headwaters	River/Stream	502201	2.10	MILES	2010	5	Ohio River	Greenup, Boyd	0.00	2.10	38.46240	-82.70875	38.47461	-82.74003	2020
KY-1624	KY502203_01	Rename			Rockhouse Fork 0.0 to 2.2	Mouth to Crooked Fork	River/Stream	502203	2.20	MILES	2016	5	Big Sandy River	Pike	0.00	2.20	37.65761	-82.39101	37.63326	-82.38000	2020
KY-1625	KY502205_01	Rename			Rockhouse Fork 0.0 to 8.7	Rockcastle Creek to Mill Branch	River/Stream	502205	8.70	MILES	2016	5	Big Sandy River	Martin	0.00	8.70	37.91107	-82.55292	37.85575	-82.60195	2020
KY-3183					Rocklick Branch 0.0 to 1.2	Mouth to Headwaters	River/Stream	510161	1.20	MILES	2020	2	Big Sandy River	Martin	0.00	1.20	37.69891	-82.40353	37.69302	-82.38987	2020
KY-1626	KY502230_01	Rename			Rocky Branch 0.0 to 3.2	Mouth to Headwaters	River/Stream	502230	3.20	MILES	2004	5	Little Sandy River	Elliott	0.00	3.20	38.11070	-83.06262	38.08671	-83.02503	2020
KY-1627	KY502240_01	Rename			Rocky Creek 13.7 to 15.2	Pryor Creek to Dam	River/Stream	502240	1.50	MILES	2014	5	Green River	Muhlenberg	13.70	15.20	37.10203	-87.02377	37.08503	-87.03164	2020
KY-1628	KY502264_01	Rename			Rocky Run 0.0 to 2.3	Mouth to Forested Buffer	River/Stream	502264	2.30	MILES	2012	4A	Salt River	Bullitt	0.00	2.30	37.97782	-85.54691	37.95229	-85.56243	2020
KY-1629	KY502293_01	Rename			Rolling Fork 0.0 to 37.75	Mouth to UT above New Haven	River/Stream	502293	37.75	MILES	2020	4A	Salt River	Bullitt, Hardin, Larue, Nelson	0.00	37.75	37.91948	-85.83064	37.64973	-85.59803	2020
KY-1630	KY502293_02	Rename			Rolling Fork 37.75 to 40.7	UT above New Haven to Pottinger Creek	River/Stream	502293	2.95	MILES	2020	4A	Salt River	Nelson, Larue	37.75	40.70	37.64973	-85.59803	37.63834	-85.57308	2020
KY-2859		Split	KY-1631	KY502293_03	Rolling Fork 40.7 to 53.6	Pottinger Creek to 0.8 River Mile Upstream of KY-84 Stiles Road/Howardstown Road	River/Stream	502293	12.90	MILES	2020	2	Salt River	Nelson, Larue	40.70	53.60	37.63834	-85.57308	37.56323	-85.60776	2020
KY-2860		Split	KY-1631	KY502293_03	Rolling Fork 53.6 to 62.3	0.8 River Mile Upstream of KY-84 Stiles Road/Howardstown Road to 0.5 River Mile Upstream of Otter Creek	River/Stream	502293	8.70	MILES	2002	2	Salt River	Nelson, Larue	53.60	62.30	37.56323	-85.60776	37.52819	-85.57651	2020
KY-1632	KY502293_04	Rename			Rolling Fork 62.3 to 75.9	0.5 River Mile Upstream of Otter Creek to Prather Creek	River/Stream	502293	13.60	MILES	2000	2	Salt River	Larue, Nelson, Marion	62.30	75.90	37.52819	-85.57651	37.55659	-85.44772	2020
KY-1633	KY502293_05	Rename			Rolling Fork 75.9 to 93.4	Prather Creek to Moore Creek	River/Stream	502293	17.50	MILES	2020	4C	Salt River	Marion	75.90	93.40	37.55659	-85.44772	37.49654	-85.32048	2020
KY-1634	KY502293_06	Rename			Rolling Fork 97.95 to 98.95	Pontchartrain Creek near Lebanon Water Works Company point of withdrawal to 1 mile upstream withdrawal	River/Stream	502293	1.00	MILES	2012	2	Salt River	Marion	97.95	98.95	37.51255	-85.26189	37.50825	-85.24680	2020
KY-1636	KY502293-94.5_01	Rename			Rolling Fork UT 0.0 to 0.6	Mouth to Highway	River/Stream	502293	0.60	MILES	2020	4A	Salt River	Marion	0.00	0.60	37.49376	-85.30576	37.49054	-85.29761	2020
KY-1635	KY502293-90.15_01	Rename			Rolling Fork UT 0.0 to 2.45	Mouth to Headwaters	River/Stream	502293	2.45	MILES	2012	4C	Salt River	Marion	0.00	2.45	37.52158	-85.35369	37.54848	-85.33721	2020
KY-3167					Rose Creek 0.0 to 2.0	Mouth to Elmore Branch	River/Stream	502327	2.00	MILES	2020	4C	Green River	Barren	0.00	2.00	36.90993	-85.97881	36.89214	-85.95762	2020
KY-1637	KY502328_01	Rename			Rose Creek 1.05 to 6.1	Near 2nd Order UT to Headwaters	River/Stream	502328	5.05	MILES	2014	5	Tradewater River	Hopkins	1.05	6.10	37.37297	-87.68350	37.40840	-87.62574	2020
KY-1638	KY502332_01	Rename			Rose Fork 0.0 to 3.1	Mouth to Shockey Fork	River/Stream	502332	3.10	MILES	2006	5	Kentucky River	Wolfe	0.00	3.10	37.73771	-83.33332	37.70028	-83.33483	2020
KY-2517	KY515113_01	Rename			Ross Branch 0.0 to 1.55	Mouth to Headwaters	River/Stream	515113	1.55	MILES	2002	2	Upper Cumberland River	Whitley	0.00	1.55	36.62961	-84.23069	36.64173	-84.20939	2020
KY-2518	KY515116_01	Rename			Ross Creek 2.7 to 7.3	Buck Lick Branch to Headwaters	River/Stream	515116	4.60	MILES	2010	2	Kentucky River	Lee	2.70	7.30	37.58762	-83.87177	37.53583	-83.89580	2020
KY-1639	KY502390_01	Rename			Rough River 0.05 to 10.45	Green River backwaters to Barnett Creek	River/Stream	502390	10.40	MILES	2020	5	Green River	Ohio, McLean	0.05	10.45	37.48552	-87.13500	37.48840	-87.03671	2020
KY-2807		Split	KY-1644	KY502390_06	Rough River 125.0 to 137.8	Rough River Lake Backwaters to Linders Creek	River/Stream	502390	12.80	MILES	2020	5	Green River	Breckinridge, Grayson, Hardin	125.00	137.80	37.58495	-86.26772	37.63677	-86.20180	2020
KY-2806		Split	KY-1644	KY502390_06	Rough River 137.8 to 149.2	Linders Creek to Vertrees Creek	River/Stream	502390	11.40	MILES	2014	4A	Green River	Breckinridge, Grayson, Hardin	137.80	149.20	37.63677	-86.20180	37.69001	-86.13664	2020
KY-3168					Rough River 149.2 to 154.6	Vertrees Creek to Mays Run	River/Stream	502390	5.40	MILES	2020	4C	Green River	Hardin	149.20	154.60	37.69001	-86.13664	37.71578	-86.09307	2020
KY-1640	KY502390_02	Rename			Rough River 27.2 to 28.9	Muddy Creek to Hartford POTW	River/Stream	502390	1.70	MILES	2004	2	Green River	Ohio	27.20	28.90	37.43822	-86.92999	37.44603	-86.92332	2020
KY-1641	KY502390_03	Rename			Rough River 29.8 to 30.8	Hartford Municipal Water Works to 1 Mile Upstream	River/Stream	502390	1.00	MILES	2014	2	Green River	Ohio	29.80	30.80	37.45306	-86.91057	37.46415	-86.90154	2020
KY-1642	KY502390_04	Rename			Rough River 55.1 to 64.35	Adams Fork to Caney Creek	River/Stream	502390	9.25	MILES	2020	5	Green River	Ohio	55.10	64.35	37.55949	-86.79312	37.54462	-86.69807	2020
KY-2874					Rough River 74.1 to 74.45	Big Slough to KY-54 Owensboro Road	River/Stream	502390	0.35	MILES	2020	3	Green River	Grayson, Ohio	74.10	74.45	37.53770	-86.59739	37.54196	-86.59707	2020
KY-2875		Split	KY-1643	KY502390_05	Rough River 87.0 to 89.75	Rock Lick Creek to UT (On Right Descending Bank)	River/Stream	502390	2.75	MILES	2008	2	Green River	Breckinridge, Grayson	87.00	89.75	37.59959	-86.54126	37.62313	-86.50975	2020
KY-2876		Split	KY-1643	KY502390_05	Rough River 89.75 to 90.25	UT (On Right Descending Bank) to 0.1 miles below Dam of Rough River Lake	River/Stream	502390	0.50	MILES	2020	2	Green River	Breckinridge, Grayson	89.75	90.25	37.62313	-86.50975	37.62111	-86.50114	2020
KY-1645	KY502393_00	Rename			Rough River Lake	Entire Reservoir	Lake/Reservoir	502393	5034	ACRES	2020	5	Green River	Grayson, Breckinridge			37.61985	-86.49998	37.60199	-86.26905	2020
KY-2891		Split	KY-1646	KY502412_01	Round Stone Creek 0.0 to 3.8	Mouth to KY-1140 Raider Hollow Road	River/Stream	502412	3.80	MILES	2020	2	Green River	Hart	0.00	3.80	37.41399	-86.03992	37.41002	-86.00232	2020
KY-2890		Split	KY-1646	KY502412_01	Round Stone Creek 3.8 to 10.25	KY-1140 Raider Hollow Road to Headwaters	River/Stream	502412	6.45	MILES	2020	2	Green River	Hart	3.80	10.25	37.41002	-86.00232	37.41377	-85.94048	2020
KY-2519	KY515136_01	Rename			Roundstone Creek 0.0 to 10.95	Mouth to Brush Creek	River/Stream	515136	10.95	MILES	2020	2B	Upper Cumberland River	Rockcastle	0.00	10.95	37.29183	-84.21140	37.37481	-84.26862	2020
KY-2743					Roundstone Creek 13.45 to 17.0	Renfro Creek To Clear Creek	River/Stream	515136	3.55	MILES	2020	3	Upper Cumberland River	Rockcastle	13.45	17.00	37.38296	-84.29197	37.41343	-84.30657	2020
KY-2520	KY515136_03	Rename			Roundstone Creek 17.0 to 23.8	Clear Creek to Little Clear Creek	River/Stream	515136	6.80	MILES	2006	5	Upper Cumberland River	Rockcastle	17.00	23.80	37.41343	-84.30657	37.48844	-84.31983	2020
KY-2744					Roundstone Creek 23.8 to 26.4	Little Clear Creek to Interstate-75	River/Stream	515136	2.60	MILES	2020	3	Upper Cumberland River	Rockcastle	23.80	26.40	37.48844	-84.31983	37.51810	-84.31923	2020
KY-3229					Roundstone Creek UT 0.0 to 2.9	Mouth to Headwaters	River/Stream	515136	2.90	MILES	2020	2	Upper Cumberland River	Rockcastle	0.00	2.90	37.43740	-84.31646	37.47392	-84.30124	2020
KY-1647	KY502422_01	Rename			Rowan Creek 0.0 to 7.5	Mouth to Headwaters	River/Stream	502422	7.50	MILES	2000	2	Salt River	Nelson	0.00	7.50	37.79648	-85.47955	37.82917	-85.38970	2020
KY-2662	KY90000055_00	Rename			Royal Spring	Entire Springshed of Royal Spring (including basins described as KWIS station Kentucky Horse Park and Royal Spring sub-basin)	Spring	90000055	14819	ACRES	2020	2	Kentucky River	Scott, Fayette			38.20891	-84.56166	38.04475	-84.47220	2020
KY-2685	KY90003742_00	Rename			Rueben Ray Spring	Entire Springshed of Rueben Ray Spring	Spring	90003742	2895	ACRES	2020	2	Lower Cumberland River	Caldwell, Lyon			37.18430	-88.08335	37.15578	-88.04213	2020
KY-10	KY502469_01	Rename			Running Slough 0.3 to 16.6	Stateline to Headwaters	River/Stream	1300254	16.30	MILES	2002	5	Mississippi River	Fulton	0.30	16.60	36.50672	-89.29979	36.53189	-89.19284	2020
KY-52	KY2635708_01	Rename			Rush Creek 0.0 to 1.4	Mouth to Marion STP	River/Stream	2635708	1.40	MILES	2002	5	Ohio River	Crittenden	0.00	1.40	37.35916	-88.06776	37.34396	-88.06667	2020
KY-1648	KY502521_01	Rename			Russell Creek 0.0 to 7.2	Mouth to South Fork of Russell Creek	River/Stream	502521	7.20	MILES	2008	2	Green River	Green	0.00	7.20	37.22938	-85.51040	37.18170	-85.49613	2020
KY-1650	KY502521_03	Rename			Russell Creek 12.8 to 24.1	Caney Fork to Big Creek	River/Stream	502521	11.30	MILES	2004	2	Green River	Green, Adair	12.80	24.10	37.16994	-85.43512	37.12332	-85.41772	2020
KY-1651	KY502521_04	Rename			Russell Creek 24.1 to 41.0	Big Creek to Columbia STP Outfall	River/Stream	502521	16.90	MILES	2014	4A	Green River	Adair	24.10	41.00	37.12332	-85.41772	37.10923	-85.30489	2020
KY-1652	KY502521_05	Rename			Russell Creek 41.0 to 42.2	Columbia STP Outfall to Sulphur Creek	River/Stream	502521	1.20	MILES	2008	4A	Green River	Adair	41.00	42.20	37.10884	-85.30368	37.10453	-85.28752	2020
KY-2785		Split	KY-1653	KY502521_06	Russell Creek 42.2 to 56.7	Sulphur Creek to Reynolds Creek	River/Stream	502521	14.50	MILES	2020	2	Green River	Adair	42.20	56.70	37.10453	-85.28752	37.04137	-85.18825	2020
KY-2784		Split	KY-1653	KY502521_06	Russell Creek 56.7 to 60.35	Reynolds Creek to Little Clifty Creek	River/Stream	502521	3.65	MILES	2014	2	Green River	Adair	56.70	60.35	37.04137	-85.18825	37.06094	-85.15930	2020
KY-1654	KY502521_07	Rename			Russell Creek 60.35 to 66.35	Little Clifty Creek to confluence with Mount Olive Creek and Hudson Creek	River/Stream	502521	6.00	MILES	2008	4A	Green River	Adair, Russell	60.35	66.35	37.06094	-85.15930	37.09167	-85.10332	2020
KY-1649	KY502521_02	Rename			Russell Creek 7.2 to 12.8	South Fork Russell Creek to Caney Fork	River/Stream	502521	5.60	MILES	2020	2	Green River	Green	7.20	12.80	37.18170	-85.49613	37.16994	-85.43512	2020
KY-3019		Split	KY-1655	KY502524_01	Russell Fork 0.0 to 4.35	Mouth to Mountain Water District	River/Stream	502524	4.35	MILES	2020	2	Big Sandy River	Pike	0.00	4.35	37.40715	-82.44030	37.36393	-82.40928	2020
KY-1657	KY502524_03	Rename			Russell Fork 12.65 to 16.5	Elkhorn Creek to KY/VA State Line	River/Stream	502524	3.85	MILES	2020	2	Big Sandy River	Pike	12.65	16.50	37.30107	-82.35479	37.29574	-82.31459	2020
KY-3020		Split	KY-1655	KY502524_01	Russell Fork 4.35 to 5.35	Mountain Water District to 1 Mile Upstream	River/Stream	502524	1.00	MILES	2020	2	Big Sandy River	Pike	4.35	5.35	37.36393	-82.40928	37.35302	-82.40319	2020
KY-3018		Split	KY-1655	KY502524_01	Russell Fork 5.35 to 6.3	1 Mile Upstream of Mountain Water District to Road Creek	River/Stream	502524	0.95	MILES	2020	2	Big Sandy River	Pike	5.35	6.30	37.35302	-82.40319	37.35481	-82.39108	2020
KY-1656	KY502524_02	Rename			Russell Fork 6.3 to 9.15	Road Creek to Ferrell Creek	River/Stream	502524	2.85	MILES	2004	2	Big Sandy River	Pike	6.30	9.15	37.35481	-82.39108	37.34156	-82.37528	2020
KY-2703					Russell Fork 9.15 to 12.65	Ferrell Creek to Elkhorn Creek	River/Stream	502524	3.50	MILES	2020	3	Big Sandy River	Pike	9.15	12.65	37.34156	-82.37528	37.30107	-82.35479	2020
KY-2521	KY515156_01	Rename			Ryans Creek 0.0 to 5.7	Mouth to Headwaters	River/Stream	515156	5.70	MILES	2006	5	Upper Cumberland River	McCreary, Whitley	0.00	5.70	36.64603	-84.25134	36.63883	-84.31456	2020
KY-2522	KY515171_01	Rename			Sadler Creek 0.0 to 2.4	Mouth to UT	River/Stream	515171	2.40	MILES	2008	5	Ohio River	Livingston	0.00	2.40	37.36832	-88.37710	37.35583	-88.34887	2020
KY-2689	KYCLN010_00	Rename			Salem Lake (aka Hodgenville City Reservoir)	Entire Reservoir	Lake/Reservoir	300	111	ACRES	2020	5	Green River	Larue			37.58894	-85.71138	37.60347	-85.71082	2020
KY-1658	KY502805_01	Rename			Salisbury Branch 0.0 to 2.1	Mouth to Headwaters	River/Stream	502805	2.10	MILES	2010	5	Big Sandy River	Knott	0.00	2.10	37.40672	-82.77673	37.38346	-82.75896	2020
KY-2523	KY515184_01	Rename			Sallys Branch 0.0 to 2.95	mouth to headwaters	River/Stream	515184	2.95	MILES	2012	4A	Upper Cumberland River	Laurel	0.00	2.95	37.11770	-84.05074	37.13604	-84.01235	2020
KY-1659	KY502818_01	Rename			Salt Block Creek 0.0 to 3.35	Mouth to Headwaters	River/Stream	502818	3.35	MILES	2014	4A	Salt River	Jefferson	0.00	3.35	38.12245	-85.78452	38.08236	-85.79356	2020
KY-2524	KY515186_01	Rename			Salt Fork 0.0 to 0.7	Mouth to Round Meadow Branch	River/Stream	515186	0.70	MILES	2002	2	Kentucky River	Menifee	0.00	0.70	37.85619	-83.59482	37.86400	-83.60128	2020
KY-1661	KY502826_01	Rename			Salt Lick Creek 0.0 to 1.45	Mouth to UT	River/Stream	502826	1.45	MILES	2004	5	Green River	Warren	0.00	1.45	37.04721	-86.58304	37.03186	-86.57430	2020
KY-1662	KY502827_01	Rename			Salt Lick Creek 0.0 to 7.95	Mouth to Headwaters	River/Stream	502827	7.95	MILES	2016	5	Salt River	Larue, Marion	0.00	7.95	37.55419	-85.52127	37.46863	-85.46713	2020
KY-1663	KY502828_01	Rename			Salt Lick Creek 0.1 to 7.15	Ohio River Backwaters to Big Sulphur Branch	River/Stream	502828	7.05	MILES	2004	5	Ohio River	Lewis	0.10	7.15	38.60459	-83.32049	38.58345	-83.39790	2020
KY-1660	KY502825_01	Rename			Salt Lick Creek 1.1 to 3.6	Channelization to Headwaters	River/Stream	502825	2.50	MILES	2008	2	Upper Cumberland River	Russell, Clinton	1.10	3.60	36.87100	-85.18392	36.84345	-85.17000	2020
KY-6	KY1269923_01	Rename			Salt Lick Creek 1.8 to 4.6	Long Fork to KY/TN State Line	River/Stream	1269923	2.80	MILES	2004	2	Green River	Monroe	1.80	4.60	36.64572	-85.91720	36.62591	-85.91861	2020
KY-2525	KY515191_01	Rename			Salt Lick Creek 2.85 to 9.55	McGulley Branch to Clear Creek	River/Stream	515191	6.70	MILES	2000	5	Licking River	Bath	2.85	9.55	38.11488	-83.62729	38.06891	-83.61202	2020
KY-2526	KY515191_02	Rename			Salt Lick Creek 9.55 to 15.5	Clear Creek to Stonequarry Creek	River/Stream	515191	5.95	MILES	2004	2	Licking River	Bath, Menifee	9.55	15.50	38.06891	-83.61202	38.01408	-83.63695	2020
KY-1673	KY502831_01	Rename			Salt River 0.0 to 4.55	Mouth to Headwaters	River/Stream	502831	4.55	MILES	2000	5	Kentucky River	Henry	0.00	4.55	38.38259	-85.00818	38.41004	-85.04666	2020
KY-1664	KY502830_01	Rename			Salt River 11.7 to 25.9	Rolling Fork to Floyds Fork	River/Stream	502830	14.20	MILES	2020	5	Salt River	Bullitt	11.70	25.90	37.91941	-85.83079	37.99837	-85.67787	2020
KY-1670	KY502830_07	Rename			Salt River 111.75 to 135.3	Lyons Branch Confluence to Dry Branch Confluence	River/Stream	502830	23.55	MILES	2012	5	Salt River	Mercer	111.75	135.30	37.90614	-84.87872	37.72867	-84.86318	2020
KY-1671	KY502830_08	Rename			Salt River 135.3 to 142.65	Dry Branch to Quirks Run	River/Stream	502830	7.35	MILES	2006	2	Salt River	Boyle, Mercer	135.30	142.65	37.72866	-84.86318	37.67336	-84.87154	2020

KY-1665	KY502830_02	Rename			Salt River 50.1 to 55.4	Simpson Creek to Taylorsville POTW	River/Stream	502830	5.30 MILES	2002 2	Salt River	Spencer	50.10	55.40	37.99385	-85.40100	38.00940	-85.35744	2020
KY-1666	KY502830_03	Rename			Salt River 55.4 to 55.85	Taylorsville WWTP to UT	River/Stream	502830	0.45 MILES	2002 2	Salt River	Spencer	55.40	55.85	38.00940	-85.35744	38.01485	-85.35375	2020
KY-1667	KY502830_04	Rename			Salt River 56.9 to 61.0	Brashears Creek to Dam	River/Stream	502830	4.10 MILES	2006 2	Salt River	Spencer	56.90	61.00	38.02779	-85.34757	38.00373	-85.30641	2020
KY-1668	KY502830_05	Rename			Salt River 77.8 to 88.9	Taylorsville Lake Backwaters to Hammond Creek	River/Stream	502830	11.10 MILES	2020 4A	Salt River	Anderson	77.80	88.90	37.97186	-85.12749	38.00719	-84.98148	2020
KY-1669	KY502830_06	Rename			Salt River 88.9 to 111.75	Hammond Creek to Lyons Branch	River/Stream	502830	22.85 MILES	2000 2	Salt River	Anderson, Mercer	88.90	111.75	38.00719	-84.98148	37.90614	-84.87872	2020
KY-1672	KY502830-123.8_01	Rename			Salt River UT 0.0 to 2.45	Mouth to Headwaters	River/Stream	502830	2.45 MILES	2004 5	Salt River	Mercer	0.00	2.45	37.81035	-84.88502	37.82019	-84.91487	2020
KY-2527	KY515196_01	Rename			Salt Spring Branch 0.7 to 2.1	Cave Run Reservoir to Headwaters	River/Stream	515196	1.40 MILES	2006 2	Licking River	Menifee	0.70	2.10	38.00733	-83.45963	37.99564	-83.47843	2020
KY-1674	KY502844_01	Rename			Saltlick Creek 0.0 to 3.7	Mouth to Headwaters	River/Stream	502844	3.70 MILES	2016 4A	Green River	Muhlenberg	0.00	3.70	37.14550	-87.16335	37.10319	-87.15536	2020
KY-1675	KY502845_01	Rename			Saltlick Creek 0.0 to 7.0	Mouth to Headwaters	River/Stream	502845	7.00 MILES	2010 5	Big Sandy River	Floyd, Knott	0.00	7.00	37.49497	-82.84260	37.46086	-82.93678	2020
KY-1676	KY502871_01	Rename			Sam Branch 0.0 to 0.5	Mouth to land use change	River/Stream	502871	0.50 MILES	2002 5	Upper Cumberland River	Pulaski	0.00	0.50	37.23277	-84.71874	37.23091	-84.72628	2020
KY-2528	KY515208_01	Rename			Sampson Branch 0.0 to 4.85	Mouth to Headwater Pond	River/Stream	515208	4.85 MILES	2012 4A	Upper Cumberland River	Laurel	0.00	4.85	37.06547	-84.08976	37.11647	-84.09580	2020
KY-1677	KY502901_01	Rename			Sand Creek 0.0 to 3.8	Mouth to Headwaters	River/Stream	502901	3.80 MILES	2002 2	Mississippi River	Graves, Calloway	0.00	3.80	36.51525	-88.49830	36.52720	-88.45302	2020
KY-1678	KY502926_01	Rename			Sand Lick Branch 0.0 to 1.2	Mouth to Large Pond	River/Stream	502926	1.20 MILES	2012 4A	Tennessee River	Calloway	0.00	1.20	36.68236	-88.45513	36.67030	-88.46808	2020
KY-1679	KY502930_01	Rename			Sand Lick Creek 0.0 to 1.5	Mouth to Confluence with UT	River/Stream	502930	1.50 MILES	2012 2	Upper Cumberland River	Cumberland, Adair	0.00	1.50	36.92458	-85.27126	36.92129	-85.24942	2020
KY-2529	KY515224_01	Rename			Sand Lick Creek 0.0 to 5.85	Mouth to Bluebank Creek	River/Stream	515224	5.85 MILES	2000 2	Licking River	Fleming	0.00	5.85	38.30909	-83.56813	38.36450	-83.61626	2020
KY-2530	KY515224_02	Rename			Sand Lick Creek 5.95 to 8.25	Bluebank Branch to Dam	River/Stream	515224	2.30 MILES	2006 2	Licking River	Fleming	5.95	8.25	38.36450	-83.61625	38.38507	-83.61385	2020
KY-2695	KYCLN083_00	Rename			Sand Lick Creek Lake (aka Fox Valley Lake)	Entire Reservoir	Lake/Reservoir	83	87 ACRES	2020 2	Licking River	Fleming			38.38552	-83.61382	38.40316	-83.60476	2020
KY-2531	KY515225_01	Rename			Sand Lick Fork 0.0 to 5.05	Mouth to Pond	River/Stream	515225	5.05 MILES	2016 2C	Kentucky River	Powell	0.00	5.05	37.78067	-83.73356	37.72211	-83.71742	2020
KY-2532	KY515225-2.2_01	Rename			Sand Lick Fork UT 0.0 to 0.30	Mouth to sinkhole drainage area boundary	River/Stream	515225	0.30 MILES	2016 2	Kentucky River	Powell	0.00	0.30	37.75620	-83.71491	37.75837	-83.71035	2020
KY-1680	KY502935_01	Rename			Sand Ripple Creek 0.1 to 3.9	Kentucky River Backwaters to Headwaters	River/Stream	502935	3.80 MILES	2006 2	Kentucky River	Franklin, Henry	0.10	3.90	38.37772	-84.89990	38.33781	-84.92038	2020
KY-2533	KY515233_01	Rename			Sanders Creek 0.0 to 5.3	Mouth to Headwaters	River/Stream	515233	5.30 MILES	2020 4C	Upper Cumberland River	Whitley	0.00	5.30	36.76331	-84.23229	36.81599	-84.26439	2020
KY-1681	KY502960_01	Rename			Sandlick Branch 0.0 to 2.1	Mouth to Headwaters	River/Stream	502960	2.10 MILES	2016 5	Big Sandy River	Martin	0.00	2.10	37.78971	-82.58738	37.76777	-82.58058	2020
KY-1682	KY502963_01	Rename			Sandlick Creek 0.0 to 4.1	Mouth to Headwaters	River/Stream	502963	4.10 MILES	2016 5	Green River	Muhlenberg	0.00	4.10	37.14957	-87.15390	37.19491	-87.19483	2020
KY-3143					Sandlick Creek 0.0 to 4.75	Mouth to headwaters	River/Stream	502965	4.75 MILES	2020 5	Kentucky River	Letcher	0.00	4.75	37.12277	-82.83968	37.18087	-82.82518	2020
KY-1683	KY502964_01	Rename			Sandlick Creek 4.7 to 9.25	Camp Creek to Headwaters	River/Stream	502964	4.55 MILES	2014 5	Tradewater River	Christian	4.70	9.25	37.02761	-87.59584	36.97435	-87.59212	2020
KY-1684	KY502964-6.3_01	Rename			Sandlick Creek UT 0.0 to 1.4	Mouth to Headwaters	River/Stream	502964	1.40 MILES	2002 2	Tradewater River	Christian	0.00	1.40	37.00767	-87.59265	37.00008	-87.61355	2020
KY-1685	KY502979_01	Rename			Sandy Creek 0.1 to 2.4	Mouth to Dry Fork	River/Stream	502979	2.30 MILES	2012 4A	Lower Cumberland River	Livingston	0.10	2.40	37.18582	-88.29651	37.20651	-88.29705	2020
KY-1686	KY503004_01	Rename			Savage Branch 0.0 to 1.9	Mouth to Headwaters	River/Stream	503004	1.90 MILES	2016 5	Big Sandy River	Boyd	0.00	1.90	38.34359	-82.59633	38.35231	-82.62102	2020
KY-1603	KY503010_01	Rename			Sawdridge Creek 0.0 to 3.35	Mouth to Elk Lick Creek	River/Stream	503010	3.35 MILES	2006 2	Kentucky River	Owen	0.00	3.35	38.41751	-84.85467	38.42904	-84.80898	2020
KY-1604	KY503018_01	Rename			Sawyers Fork 0.0 to 3.45	Mouth to Headwaters	River/Stream	503018	3.45 MILES	2006 2	Licking River	Kenton	0.00	3.45	38.84837	-84.54021	38.82215	-84.58573	2020
KY-1605	KY503039_00	Rename			Scenic Lake	Entire Reservoir	Lake/Reservoir	503039	19 ACRES	1992 5	Ohio River	Henderson			37.87798	-87.56214	37.87850	-87.55811	2020
KY-1606	KY503068_01	Rename			Schultz Creek 1.3 to 4.9	Upstream State Road 7 bridge to Sheep Branch	River/Stream	503068	3.60 MILES	2016 2	Tygarts Creek	Greenup	1.30	4.90	38.67457	-82.92647	38.67708	-82.96680	2020
KY-1607	KY503068_02	Rename			Schultz Creek 4.9 to 7.6	Sheep Branch to Dry Fork	River/Stream	503068	2.70 MILES	2010 5	Tygarts Creek	Greenup	4.90	7.60	38.67708	-82.96680	38.64950	-82.99161	2020
KY-2534	KY515299_01	Rename			Scott Creek 1.9 to 6.15	Impoundment to Headwaters	River/Stream	515299	4.25 MILES	2010 5	Licking River	Rowan	1.90	6.15	38.09771	-83.49143	38.13465	-83.44943	2020
KY-1687	KY503122_01	Rename			Scrubgrass Branch 0.25 to 0.65	Wards Branch to Mill Creek	River/Stream	503122	0.40 MILES	2002 2	Salt River	Boyle	0.25	0.65	37.55737	-85.02926	37.56138	-85.02486	2020
KY-1688	KY503123_01	Rename			Scrubgrass Creek 0.0 to 1.55	Mouth to UT	River/Stream	503123	1.55 MILES	2000 5	Licking River	Nicholas	0.00	1.55	38.35448	-83.94701	38.34074	-83.96330	2020
KY-2535	KY515312_01	Rename			Seas Branch 0.0 to 1.95	Mouth to 1st Order UT and General Land Use Change	River/Stream	515312	1.95 MILES	2016 2	Licking River	Rowan	0.00	1.95	38.18669	-83.32964	38.21032	-83.32664	2020
KY-1689	KY503146_01	Rename			Second Creek 0.3 to 2.95	Private road to Headwaters	River/Stream	503146	2.65 MILES	2006 2	Ohio River	Boone	0.30	2.95	39.08435	-84.84137	39.08733	-84.80577	2020
KY-1690	KY503159_01	Rename			Sellers Ditch 0.0 to 1.4	Mouth to Headwater	River/Stream	503159	1.40 MILES	2014 5	Ohio River	Henderson	0.00	1.40	37.79902	-87.61532	37.79332	-87.59413	2020
KY-1691	KY503190_01	Rename			Severn Creek 0.65 to 1.35	Intake to upstream point	River/Stream	503190	0.70 MILES	2006 2	Kentucky River	Owen	0.65	1.35	38.46891	-84.91702	38.46397	-84.91059	2020
KY-1692	KY503190_02	Rename			Severn Creek 1.35 to 3.0	Kentucky River Backwaters to North Severn Creek	River/Stream	503190	1.65 MILES	2010 2	Kentucky River	Owen	1.35	3.00	38.46396	-84.91059	38.46645	-84.89242	2020
KY-2536	KY515329_01	Rename			Sexton Creek 0.1 to 5.7	Confluence of Kentucky River to Spivey Branch	River/Stream	515329	5.60 MILES	2016 5	Kentucky River	Clay, Owsley	0.10	5.70	37.35930	-83.68375	37.32766	-83.72842	2020
KY-1693	KY503229_01	Rename			Shaker Creek 0.1 to 0.8	Kentucky River to Shawnee Run	River/Stream	503229	0.70 MILES	2006 2	Kentucky River	Mercer	0.10	0.80	37.84712	-84.76700	37.84373	-84.76814	2020
KY-3311					Shaker Creek 3.8 to 7.5	Unnamed tributary with Shaker Village Pleasant Hill WWTP to headwaters	River/Stream	503229	3.70 MILES	2020 5	Kentucky River	Mercer	3.80	7.50	37.82604	-84.75196	37.78902	-84.76377	2020
KY-2644	KY517031-6.0_01	Rename			Shallow Ford Creek UT 0.0 to 1.05	Mouth to Headwaters	River/Stream	517031	1.05 MILES	2000 3	Kentucky River	Madison	0.00	1.05	37.83584	-84.33451	37.84691	-84.32430	2020
KY-1694	KY503240_01	Rename			Shannon Branch 0.0 to 0.75	Mouth to Headwaters	River/Stream	503240	0.75 MILES	2008 2	Big Sandy River	Pike	0.00	0.75	37.54885	-82.06821	37.54041	-82.07607	2020
KY-1695	KY503244_01	Rename			Shannon Creek 0.0 to 8.7	Mouth to UT	River/Stream	503244	8.70 MILES	2006 2	Licking River	Mason	0.00	8.70	38.58267	-83.96839	38.52843	-83.90897	2020
KY-1696	KY503244-5.52_01	Rename			Shannon Creek UT 0.0 to 2.2	Mouth to Headwaters	River/Stream	503244	2.20 MILES	2004 2	Licking River	Mason	0.00	2.20	38.55444	-83.93335	38.52927	-83.94690	2020
KY-3312					Shannon Run 2.5 to 7.3	Approximately 0.3 river miles upstream US-60 to headwaters	River/Stream	503245	4.80 MILES	2020 5	Kentucky River	Fayette, Jessamine	2.50	7.30	38.03991	-84.64780	37.99307	-84.63798	2020
KY-1697	KY503250_00	Rename			Shanty Hollow Lake	Entire Reservoir	Lake/Reservoir	503250	131 ACRES	2020 2	Green River	Warren, Edmonson			37.15443	-86.39122	37.13854	-86.38453	2020
KY-1698	KY503285_01	Rename			Shawnee Creek 0.0 to 3.4	Mouth to Barlow STP Outfall	River/Stream	503285	3.40 MILES	2020 5	Mississippi River	Ballard	0.00	3.40	37.05840	-89.09480	37.04383	-89.04543	2020
KY-1699	KY503285_02	Rename			Shawnee Creek 3.4 to 12.9	Barlow WWTP outfall to Headwaters	River/Stream	503285	9.50 MILES	2012 5	Mississippi River	Ballard	3.40	12.90	37.04383	-89.04543	36.98854	-88.94809	2020
KY-1700	KY503286_01	Rename			Shawnee Creek Slough 0.0 to 3.5	Mouth to Headwaters (as defined by 24K NHD blueline streams)	River/Stream	503286	3.50 MILES	2020 5	Mississippi River	Ballard	0.00	3.50	36.99305	-89.09363	37.03548	-89.09765	2020
KY-1701	KY503313_01	Rename			Shelby Branch 0.0 to 4.45	Mouth to Headwaters	River/Stream	503313	4.45 MILES	2020 4A	Kentucky River	Fayette, Jessamine	0.00	4.45	37.91758	-84.47296	37.94146	-84.42955	2020
KY-1702	KY503319_01	Rename			Shelby Creek 0.0 to 6.05	Mouth to Stagger Fork	River/Stream	503319	6.05 MILES	2016 5	Big Sandy River	Pike	0.00	6.05	37.42711	-82.49774	37.39217	-82.52354	2020
KY-1704	KY503319_03	Rename			Shelby Creek 13.25 to 19.8	Long Fork to Beefhide Creek	River/Stream	503319	6.55 MILES	2016 5	Big Sandy River	Pike	13.25	19.80	37.33901	-82.58583	37.28948	-82.59865	2020
KY-1703	KY503319_02	Rename			Shelby Creek 6.05 to 13.25	Stagger Fork to Long Fork	River/Stream	503319	7.20 MILES	2016 5	Big Sandy River	Pike	6.05	13.25	37.39217	-82.52355	37.33901	-82.58582	2020
KY-1705	KY503322_00	Rename			Shelby Lake	Entire Reservoir	Lake/Reservoir	503322	116 ACRES	2020 5	Salt River	Shelby			38.22994	-85.22131	38.24703	-85.21110	2020
KY-1706	KY503329_01	Rename			Shelly Rock Fork 0.0 to 0.9	Mouth to Headwaters	River/Stream	503329	0.90 MILES	2006 2	Kentucky River	Breathitt	0.00	0.90	37.48162	-83.15038	37.48453	-83.16462	2020
KY-3184					Shelton Creek 0.05 to 4.15	Backwaters influence to change in land use	River/Stream	503340	4.10 MILES	2020 4C	Mississippi River	Ballard	0.05	4.15	36.93620	-89.04878	36.97633	-89.01679	2020
KY-3230					Shepherd Branch 0.0 to 1.4	Mouth to change in land use where forested corridor begins	River/Stream	503345	1.40 MILES	2020 4C	Ohio River	Lewis	0.00	1.40	38.58362	-83.35545	38.59783	-83.36857	2020
KY-3231					Shepherds Run 0.0 to 4.4	Mouth to Headwaters	River/Stream	503350	4.40 MILES	2020 4C	Salt River	Washington, Marion	0.00	4.40	37.66974	-85.28354	37.61687	-85.29640	2020
KY-2892		Split	KY-1707	KY503367_01	Shillalah Creek 0.0 to 1.5	Mouth to Cumberland Gap National Historical Park Boundary	River/Stream	503367	1.50 MILES	2020 2	Upper Cumberland River	Bell	0.00	1.50	36.66632	-83.59259	36.64890	-83.57973	2020
KY-2893		Split	KY-1707	KY503367_01	Shillalah Creek 1.5 to 5.55	Cumberland Gap National Historical Park Boundary to Headwaters	River/Stream	503367	4.05 MILES	2020 2	Upper Cumberland River	Bell	1.50	5.55	36.64890	-83.57973	36.66964	-83.52480	2020
KY-1708	KY503407-1.4_01	Rename			Shoemaker Branch UT 0.0 to 1.9	Mouth to Point of Discharge	River/Stream	503407	1.90 MILES	2014 3	Green River	Daviess	0.00	1.90	37.65256	-87.09530	37.64220	-87.11880	2020
KY-2537	KY515371_01	Rename			Shop Fork 0.0 to 1.4	Mouth to Headwaters	River/Stream	515371	1.40 MILES	2004 2	Kentucky River	Leslie	0.00	1.40	37.09866	-83.19041	37.09452	-83.17207	2020
KY-1709	KY503442_01	Rename			Short Creek 0.0 to 5.0	Mouth to Headwaters	River/Stream	503442	5.00 MILES	2004 5	Salt River	Washington	0.00	5.00	37.74520	-85.37360	37.70679	-85.32630	2020
KY-1710	KY503443_01	Rename			Short Creek 0.0 to 7.95	Mouth to Headwaters	River/Stream	503443	7.95 MILES	2006 2	Licking River	Pendleton	0.00	7.95	38.64773	-84.38109	38.64197	-84.46902	2020
KY-2538	KY515399_01	Rename			Shut-in Branch 0.0 to 1.1	Mouth to Headwaters (Basin)	River/Stream	515399	1.10 MILES	2002 2	Upper Cumberland River	McCreary	0.00	1.10	36.60398	-84.25811	36.61808	-84.26150	2020
KY-1711	KY503493_01	Rename			Silas Creek 0.0 to 4.75	Mouth to UT	River/Stream	503493	4.75 MILES	2012 2	Licking River	Bourbon, Harrison	0.00	4.75	38.29799	-84.31718	38.29560	-84.36220	2020
KY-1712	KY503507_01	Rename			Silver Creek 0.0 to 11.1	mouth to near Taylor Fork	River/Stream	503507	11.10 MILES	2016 2	Kentucky River	Madison	0.00	11.10	37.79717	-84.47386	37.71101	-84.37350	2020
KY-3309		Split	KY-1713	KY503507_02	Silver Creek 11.1 to 26.05	Taylor Fork to Ballard Branch	River/Stream	503507	14.95 MILES	2020 5	Kentucky River	Madison	11.10	26.05	37.71102	-84.37350	37.64826	-84.33826	2020
KY-3310		Split	KY-1713	KY503507_02	Silver Creek 26.05 to 29.8	Ballard Branch to Hays Fork	River/Stream	503507	3.75 MILES	2020 2	Kentucky River	Madison	26.05	29.80	37.64826	-84.33826	37.64704	-84.30333	2020
KY-1714	KY503532_01	Rename			Simpson Branch 0.0 to 1.9	Mouth to Headwaters	River/Stream	503532	1.90 MILES	2010 5	Big Sandy River	Floyd	0.00	1.90	37.47728	-82.74585	37.47609	-82.71673	2020
KY-1715	KY503537_01	Rename			Simpson Creek 0.0 to 6.95	Mouth to East and West Fork Simpson Creek	River/Stream	503537	6.95 MILES	2002 2	Salt River	Nelson, Spencer	0.00	6.95	37.99434	-85.39256	37.94030	-85.34749	2020
KY-2539	KY515430_01	Rename			Sims Fork 0.0 to 5.2	Mouth to Headwaters	River/Stream	515430	5.20 MILES	2002 5	Upper Cumberland River	Bell	0.00	5.20	36.83062	-83.63032	36.87741	-83.58028	2020
KY-1717	KY503560_01	Rename			Sinking Creek 0.0 to 1.95	Mouth to Allen Branch	River/Stream	503560	1.95 MILES	2002 2	Upper Cumberland River	Pulaski	0.00	1.95	37.04433	-84.59864	37.06070	-84.60575	2020
KY-1716	KY503559_01	Rename			Sinking Creek 0.0 to 3.3	Mouth to Sink/Headwaters	River/Stream	503559	3.30 MILES	2014 5	Lower Cumberland River	Logan	0.00	3.30	36.70299	-86.84700	36.71732	-86.81073	2020
KY-2540	KY515433_01	Rename			Sinking Creek 0.0 to 9.95	Mouth to White Oak Creek	River/Stream	515433	9.95 MILES	2010 2	Upper Cumberland River	Laurel	0.00	9.95	37.10180	-84.28014	37.09095	-84.20416	2020
KY-2542	KY515433_03	Rename			Sinking Creek 13.35 to 17.65	Laurel Branch to UT	River/Stream	515433	4.30 MILES	2016 5	Upper Cumberland River	Laurel	13.35	17.65	37.09034	-84.16874	37.11191	-84.14243	2020
KY-2544	KY515434_03	Rename			Sinking Creek 15.5 to 39.9	Boiling Springs to Blue and Stony Forks	River/Stream	515434	24.40 MILES	2020 5	Ohio River	Breckinridge	15.50	39.90	37.86738	-86.37804	37.76832	-86.26254	2020
KY-2714					Sinking Creek 17.65 to 20.4	UT to Headwaters	River/Stream	515433	2.75 MILES	2020 3	Upper Cumberland River	Laurel	17.65	20.40	37.11191	-84.14243	37.13116	-84.11187	2020
KY-2885					Sinking Creek 4.0 to 8.85	KY-259 to Hardins Creek	River/Stream	515434	4.85 MILES	2020 3	Ohio River	Breckinridge	4.00	8.85	37.89513	-86.48439	37.86766	-86.44070	2020
KY-2543	KY515434_02	Rename			Sinking Creek 8.85 to 15.5	Hardins Creek to Boiling Springs	River/Stream	515434	6.65 MILES	2020 5	Ohio River	Breckinridge	8.85	15.50	37.86766	-86.44070	37.86738	-86.37804	2020
KY-2541	KY515433_02	Rename			Sinking Creek 9.95 to 13.35	White Oak Creek to Laurel Branch	River/Stream	515433	3.40 MILES	2016 2	Upper Cumberland River	Laurel	9.95	13.35	37.09095	-84.20416	37.09036	-84.16872	2020
KY-1719	KY503569_02	Rename			Sinking Fork 13.7 to 16.9	I-24 to Below SR 117	River/Stream	503569	3.20 MILES	2002 5	Lower Cumberland River	Christian	13.70	16.90	36.83366	-87.66501	36.84384	-87.64124	2020
KY-1718	KY503569_01	Rename			Sinking Fork 2.1 to 5.65	Stillhouse Branch to Steele Branch	River/Stream	503569	3.55 MILES	2020 5	Lower Cumberland River	Trigg	2.10	5.65	36.85108	-87.76172	36.84344	-87.72614	2020
KY-1720	KY503569_03	Rename			Sinking Fork 24.6 to 31.1	Muddy Fork to West Fork	River/Stream	503569	6.50 MILES	2010 2	Lower Cumberland River	Christian	24.60	31.10	36.87559	-87.59645	36.92039	-87.57563	2020
KY-1721	KY503569_04	Rename			Sinking Fork 31.0 to 32.7	West Fork of Sinking Creek to East Fork of Sinking Creek	River/Stream	503569	1.70 MILES	2006 5	Lower Cumberland River	Christian	31.00	32.70	36.92039	-87.57563	36.94137	-87.56842	2020
KY-3232					Sinking Fork 5.65 to 13.7	Steele Branch to I-24	River/Stream	503569	8.05 MILES	2020 4C	Lower Cumberland River	Trigg, Christian	5.65	13.70	36.84344	-87.72614	36.83366	-87.66501	2020
KY-1722	KY503585_01	Rename			Sixes Creek 0.0 to 5.65	Mouth to Headwaters	River/Stream	503585	5.65 MILES	2020 2	Green River	Ohio	0.00	5.65	37.34152	-86.69995	37.41800	-86.70376	2020
KY-2813		Split	KY-1723	KY503586_01	Sixmile Creek 0.1 to 7.1	Mouth (backwaters) to Little Sixmile Creek	River/Stream	503586	7.00 MILES	2020 2	Kentucky River	Henry	0.10	7.10	38.43633	-84.96459	38.38448	-85.00261	2020
KY-2854					Sixmile Creek 11.9 to 13.9	Backbone Creek to Discharge	River/Stream	503586	2.00 MILES	2020 3	Kentucky River	Henry	11.90	13.90	38.33978	-84.99689	38.33734	-85.01157	2020
KY-1724	KY503586_02	Rename			Sixmile Creek 13.9 to 15.9	Discharge to 1 mile upstream	River/Stream	503586	2.00 MILES	2012 3	Kentucky River	Shelby, Henry	13.90	15.90	38.33734	-85.01157	38.32201	-85.01357	2020
KY-2814		Split	KY-1723	KY503586_01	Sixmile Creek 7.1 to 11.9	Little Sixmile Creek to Backbone Creek	River/Stream	503586	4.80 MILES	2016 2	Kentucky River	Henry	7.10	11.90	38.38448	-85.00261	38.33978	-84.99689	2020
KY-1725	KY503590_01	Rename			Sizemore Branch 0.0 to 2.0	Mouth to Headwaters	River/Stream	503590	2.00 MILES	2010 5	Big Sandy River	Floyd	0.00	2.00	37.47016	-82.75399	37.45364	-82.77472	2020
KY-1726	KY503595_01	Rename			Skaggs Creek 12.65 to 23.55	Barren River Lake backwaters to Falling Timber Creek	River/Stream	503595	10.90 MILES	2020 4A	Green River	Barren	12.65	23.55	36.90605	-85.98505	36.91246	-85.90654	2020
KY-2677	KY90001398_00	Rename			Skees Karst Window 1	Entire Springshed of Waddell Spring, represented by Skees Karst Window 1	Spring	90001398	17846 ACRES	2020 3	Green River	Hardin, Larue			37.55591	-86.00493	37.50069	-85.84256	2020
KY-2546	KY515451_01	Rename			Skegg Creek 0.0 to 3.3	Mouth to East Fork of Skegg Creek	River/Stream	515451	3.30 MILES	2002 5	Upper Cumberland River	Rockcastle	0.00	3.30	37.22257	-84.26729	37.23584	-84.29372	2020
KY-2547	KY515451_02	Rename			Skegg Creek 3.3 to 11.1	East Fork of Skegg Creek to confluence of Dry Fork and West Fork of Skegg Creek	River/Stream	515451	7.80 MILES	2008 2	Upper Cumberland River	Rockcastle	3.30	11.10	37.23584	-84.29372	37.25783	-84.36130	2020
KY-1727	KY503607_01	Rename			Skinframe Creek 0.0 to 4.9	Mouth to Horseapple Creek	River/Stream	503607	4.90 MILES	2012 5	Lower Cumberland River	Lyon	0.00	4.90	37.15462	-88.12205	37.12824	-88.08068	2020
KY-2886					Skinframe Creek 4.9 to 8.0	Horseapple Creek to Headwaters	River/Stream	503607	3.10 MILES	2020 3	Lower Cumberland River	Lyon	4.90	8.00	37.12824	-88.08068	37.10536	-88.04707	2020
KY-1728	KY503615_01	Rename			Skinner Creek 0.0 to 5.9	Mouth to Headwaters	River/Stream	503615	5.90 MILES	2002 5	Lower Cumberland River	Trigg	0.00	5.90	36.74371	-87.74080	36.69739	-87.80229	2020
KY-2548	KY515465_01	Rename			Slabcamp Creek 0.0 to 3.85	Mouth to Headwaters including Stonecoal Branch	River/Stream	515465	3.85 MILES	2006 2	Licking River	Rowan	0.00	3.85	38.09982	-83.32884	38.13916	-83.35479	2020
KY-1729	KY503629_01	Rename			Slash Branch 0.0 to 0.75	Mouth to Discharge	River/Stream	503629	0.75 MILES	2010 3	Ohio River	Greenup	0.00	0.75	38.64225	-82.86981	38.63222	-82.87234	2020
KY-2549	KY515470_01	Rename			Slate Creek 0.0 to 13.55	Mouth to Mill Creek	River/Stream	515470	13.55 MILES	2010 5	Licking River	Bath	0.00	13.55	38.21830	-83.69828	38.11219	-83.74664	2020
KY-3238					Slate Creek 13.55 to 16.8	Mill Creek to municipal discharge	River/Stream	515470	3.25 MILES	2020 2	Licking River	Bath	13.55	16.80	38.11219	-83.74664	38.12720	-83.76869	2020
KY-2550	KY515470_03	Rename			Slate Creek 36.05 to 37.05	Mt. Sterling water withdrawal to 1 mile upstream	River/Stream	515470	1.00 MILES	2012 2	Licking River	Montgomery	36.05	37.05	38.06268	-83.84784	38.05497	-83.84449	2020
KY-2551	KY515470_04	Rename			Slate Creek 42.85 to 52.8	Spencer Creek to Spruce Creek	River/Stream	515470	9.95 MILES	2020 4C	Licking River	Montgomery	42.85	52.80	38.03405	-83.82331	37.95481	-83.81358	2020
KY-2552	KY515470_05	Rename			Slate Creek 52.8 to 57.2	Spruce Creek Confluence to EF Slate Creek Confluence	River/Stream	515470	4.40 MILES	2012 5	Licking River	Menifee, Montgomery	52.80	57.20	37.95481	-83.81358	37.94612	-83.75780	2020
KY-2553	KY515470_06	Rename			Slate Creek 57.2 to 58.25	East Fork Slate Creek Confluence to Peter Trace Confluence	River/Stream	515470	1.05 MILES	2012 4C	Licking River	Menifee	57.20	58.25	37.94612	-83.75780	37.94590	-83.74193	2020
KY-3246					Sleepy Hollow Association Spring	Entire Springshed	Spring	90000785	35 ACRES	2020 3	Salt River	Oldham			38.34583	-85.55667	38.34465	-85.55005	2020
KY-1730	KY503678_01	Rename			Sleepy Run 0.0 to 3.15	Mouth to Headwaters	River/Stream	503678	3.15 MILES	2002 4A	Licking River	Fleming	0.00	3.15	38.43124	-83.69365	38.45183	-83.73700	2020
KY-1732	KY503714_01	Rename			Slover Creek UT 0.0 to 2.2	Mouth to Headwaters	River/Stream	503714	2.20 MILES	2008 5	Tradewater River	Webster	0.00	2.20	37.45213	-87.80042	37.42394	-87.79592	2020
KY-1733	KY503714-3.4-0.2_01	Rename			Slover Creek UT of UT 0.2 to 1.5	0.2 Miles above UT to Western UT	River/Stream	503714	1.30 MILES	2004 5	Tradewater River	Webster	0.20	1.50	37.43774	-87.74327	37.42010	-87.73521	2020
KY-7	KY1270575_01	Rename			Smith Branch 0.0 to 1.05	Mouth to Tennessee State Line	River/Stream	1270575	1.05 MILES	2012 5	Lower Cumberland River	Logan	0.00	1.05	36.65483	-86.87135	36.64695	-86.86003	2020
KY-1734	KY503736_01	Rename			Smith Branch 0.65 to 2.5	Reservoir to Source	River/Stream	503736	1.85 MILES	2010 5	Kentucky River	Knott	0.65	2.50	37.22301	-82.98923	37.20028	-83.00113	2020
KY-1735	KY503776_01	Rename			Smith Creek 0.0 to 2.2	Mouth to UT	River/Stream	503776	2.20 MILES	2010 2	Upper Cumberland River	Clinton	0.00	2.20	36.65324	-85.10666	36.67366	-85.10266	2020
KY-1737	KY503778_01	Rename			Smith Creek 0.0 to 3.3	Mouth to Headwaters	River/Stream	503778	3.30 MILES	2002 2	Upper Cumberland River	Letcher	0.00	3.30	37.05103	-82.79218	37.02864	-82.75114	2020
KY-1738	KY503782_01	Rename			Smith Creek 0.0 to 4.45	Mouth to Headwaters	River/Stream	503782	4.45 MILES	2004 2	Green River	Ohio	0.00	4.45	37.58778	-86.74651	37.59944	-86.79644	2020
KY-1739	KY503783_01	Rename			Smith Creek 2.2 to 4.4	Lick Branch to 0.1 miles below UT	River/Stream	503783	2.20 MILES	2004 5	Tygarts Creek	Carter	2.20	4.40	38.44090	-83.15386	38.45835	-83.18513	2020
KY-1736	KY503776-2.2_01	Rename			Smith Creek UT 0.0 to 1.6	Mouth to Headwaters	River/Stream	503776	1.60 MILES	2012 5	Upper Cumberland River	Clinton	0.00	1.60	36.67366	-85.10266	36.68077	-85.07979	2020
KY-1740	KY503789-0.95_01	Rename			Smith Fork UT 0.0 to 0.55	Mouth to Headwaters	River/Stream	503789	0.55 MILES	2006 5	Kentucky River	Madison	0.00	0.55	37.87318	-84.32358	37.87565	-84.33300	2020
KY-1741	KY503819_01	Rename			Smoky Creek 1.4 to 4.3	Smoky Valley Lake to Smith Branch	River/Stream	503819	2.90 MILES	2010 2	Tygarts Creek	Carter	1.40	4.30	38.36432	-83.13439	38.35279	-83.17062	2020
KY-1742	KY503825_00	Rename			Smoky Valley Lake	Dam to Lake Boundaries	Lake/Reservoir	503825	29 ACRES	2016 5	Tygarts Creek	Carter			38.36608	-83.11764	38.36658	-83.13300	2020
KY-1743	KY503833_01	Rename			Snag Creek 1.1 to 6.55	Ohio River backwaters to Headwaters	River/Stream	503833	5.45 MILES	2020 5	Ohio River	Bracken	1.10	6.55	38.77711	-84.16772	38.73897	-84.21836	2020
KY-3169					Snake Creek 0.1 to 3.35	Green River Lake backwaters to pond at headwaters	River/Stream	503839	3.25 MILES	2020 4C	Green River	Adair	0.10	3.35	37.18026	-85.23238	37.14457	-85.20796	2020
KY-2554	KY515528_01	Rename			Snow Creek 0.0 to 3.9	Mouth to Headwaters	River/Stream	515528	3.90 MILES	2004 5	Kentucky River	Powell	0.00	3.90	37.85298	-84.00823	37.87980	-83.97044	2020
KY-1744	KY503868_01	Rename			Soldier Creek 0.0 to 5.7	Mouth to confluence of North Fork and South Fork of Soldier Creek	River/Stream	503868	5.70 MILES	2020 4A	Tennessee River	Marshall	0.00	5.70	36.79647	-88.47555	36.78881	-88.39095	2020
KY-2555	KY515532_01	Rename			Soldier Fork 0.0 to 5.6	Jacobs Fork to Headwaters	River/Stream	515532	5.60 MILES	2010 5	Tygarts Creek	Carter	0.00	5.60	38.26575	-83.22336	38.26330	-83.31558	2020
KY-1746	KY503876_01	Rename			Somerset Creek 0.0 to 4.45	Mouth to East Fork Somerset Creek	River/Stream	503876	4.45 MILES	2016 4A	Licking River	Nicholas	0.00	4.45	38.22393	-84.00551	38.24019	-83.98271	2020
KY-1745	KY503875_01	Rename			Somerset Creek 0.0 to 5.85	Mouth to UT at 5.85 where land use change occurs	River/Stream	503875	5.85 MILES	2016 4A	Licking River	Montgomery	0.00	5.85	38.13521	-83.99452	38.08471	-83.97557	2020
KY-1747	KY503892_01	Rename			South Benson Creek 0.0 to 5.8	Mouth to US 60	River/Stream	503892	5.80 MILES	2000 2	Kentucky River	Franklin	0.00	5.80	38.20824	-84.93756	38.16198	-84.95579	2020
KY-1749	KY503901_02	Rename			South Elkhorn Creek 16.6 to 34.5	Lee Branch to Town Branch	River/Stream	503901	17.90 MILES	2010 5	Kentucky River	Woodford, Scott	16.60	34.50	38.17074	-84.68991	38.11335	-84.62964	2020
KY-1750	KY503901_03	Rename			South Elkhorn Creek 34.5 to 52.5	Town Branch to Pond	River/Stream	503901	18.00 MILES	2020 5	Kentucky River	Fayette, Woodford	34.50	52.50	38.11335	-84.62964	37.99001	-84.53616	2020
KY-1748	KY503901_01	Rename			South Elkhorn Creek 5.0 to 16.6	Buck Run to Lee Branch	River/Stream	503901	11.60 MILES	2010 4A	Kentucky River	Scott, Franklin, Woodford	5.00	16.60	38.20036	-84.76747	38.17074	-84.68991	2020
KY-1751	KY503904_01	Rename			South Fork Bayou de Chien 0.0 to 2.0	Mouth to UT	River/Stream	503904	2.00 MILES	2006 5	Mississippi River	Graves	0.00	2.00	36.58062	-88.80302	36.55951	-88.78429	2020
KY-1752	KY503904_02	Rename			South Fork Bayou de Chien 2.0 to 7.8	UT to Headwaters	River/Stream	503904	5.80 MILES	2002 5	Mississippi River	Graves	2.00	7.80	36.55951	-88.78416	36.50470	-88.75156	2020
KY-1753	KY503905_01	Rename			South Fork Beargrass Creek 0.0 to 2.7	Mouth to Concrete Section	River/Stream	503905	2.70 MILES	2010 5	Ohio River	Jefferson	0.00	2.70	38.25250	-85.72721	38.22470	-85.72697	2020
KY-1754	KY503905_02	Rename			South Fork Beargrass Creek 2.7 to 13.6	End of Concrete Section to Headwaters	River/Stream	503905	10.90 MILES	2002 5	Ohio River	Jefferson	2.70	13.60	38.22470	-85.72697	38.21384	-85.58594	2020
KY-1755	KY503906_01	Rename			South Fork Beaver Creek 0.0 to 4.5	Mouth to KY-249	River/Stream	503906	4.50 MILES	2020 5	Green River	Barren	0.00	4.50	36.98182	-85.98070	36.98101	-85.91329	2020
KY-1756	KY503908_01	Rename			South Fork Camp Creek 0.0 to 1.35	Mouth to Drainage Pond	River/Stream	503908	1.35 MILES	2012 4A	Tennessee River	Graves	0.00	1.35	36.94262	-88.60605	36.92429	-88.61353	2020
KY-1757	KY503908-0.05_01	Rename			South Fork Camp Creek UT 0.0 to 3.0	Mouth to Headwaters	River/Stream	503908	3.00 MILES	2012 4A	Tennessee River	Graves	0.00	3.00	36.94222	-88.60623	36.92430	-88.64642	2020
KY-115	KY485700_01	Rename			South Fork Collier Creek 0.0 to 1.9	Mouth to Headwaters	River/Stream	485700	1.90 MILES	2008 5	Upper Cumberland River	Letcher	0.00	1.90	37.00496	-82.86426	36.99667	-82.83622	2020
KY-3327		Split	KY-1758	KY503919_01	South Fork Currys Fork 0.0 to 5.3	Confluence with Currys Fork to UT (~0.2 river miles upstream Camp Creek)	River/Stream	503919	5.30 MILES	2014 5	Salt River	Oldham	0.00	5.30	38.35737	-85.44007	38.37060	-85.36337	2020
KY-3328		Split	KY-1758	KY503919_01	South Fork Currys Fork UT 0.0 to 0.8	Mouth to headwaters near pond	River/Stream	503919	0.80 MILES	2014 5	Salt River	Oldham	0.00	0.80	38.37060	-85.36337	38.37910	-85.35590	2020
KY-1759	KY503919-3.9_01	Rename			South Fork Currys Fork UT 0.0 to 1.8	Mouth to Headwaters	River/Stream	503919	1.80 MILES	2014 5	Salt River	Oldham	0.00	1.80	38.36478	-85.38440	38.38329	-85.37231	2020
KY-1760	KY503920_01	Rename			South Fork Darby Creek 0.0 to 3.95	Mouth to Headwaters	River/Stream	503920	3.95 MILES	2016 5	Ohio River	Oldham	0.00	3.95	38.39072	-85.50089	38.36330	-85.45096	2020
KY-2558	KY515543_01	Rename			South Fork Dog Slaughter Creek 0.0 to 4.7	Mouth to Headwaters	River/Stream	515543	4.70 MILES	2002 2	Upper Cumberland River	Whitley	0.00	4.70	36.85930	-84.30072	36.84804	-84.24145	2020
KY-2725					South Fork Grassy Creek 0.0 to 10.35	Mouth to Lightfoot Fork	River/Stream	503923	10.35 MILES	2020 3	Licking River	Pendleton	0.00	10.35	38.79193	-84.42895	38.72644	-84.41984	2020
KY-1761	KY503923_01	Rename			South Fork Grassy Creek 10.35 to 15.15	Lightfoot Fork to Brushy Fork	River/Stream	503923	4.80 MILES	2020 2	Licking River	Pendleton	10.35	15.15	38.72644	-84.41984	38.70106	-84.44697	2020
KY-2726					South Fork Grassy Creek 15.15 to 19.8	Brushy Fork to Greasy Creek	River/Stream	503923	4.65 MILES	2020 3	Licking River	Pendleton	15.15	19.80	38.70106	-84.44697	38.68302	-84.48375	2020
KY-1762	KY503924_01	Rename			South Fork Green River 0.0 to 2.2	Mouth to Trace Fork	River/Stream	503924	2.20 MILES	2002 2	Green River	Casey	0.00	2.20	37.21701	-84.98491	37.20830	-84.95325	2020
KY-1763	KY503924_02	Rename			South Fork Green River 2.2 to 7.45	Trace Fork to Turkey Creek	River/Stream	503924	5.25 MILES	2004 2	Green River	Casey	2.20	7.45	37.20830	-84.95325	37.18574	-84.88920	2020
KY-1764	KY503926_01	Rename			South Fork Gunpowder Creek 0.0 to 1.95	Mouth to Fowlers Fork	River/Stream	503926	1.95 MILES	2002 5	Ohio River	Boone	0.00	1.95	38.99062	-84.70720	38.97795	-84.69429	2020
KY-1765	KY503926_02	Rename			South Fork Gunpowder Creek 4.2 to 6.4	UT to UT	River/Stream	503926	2.20 MILES	2016 5	Ohio River	Boone	4.20	6.40	38.97413	-84.66620	38.94893	-84.64639	2020
KY-1766	KY503926_03	Rename			South Fork Gunpowder Creek 6.4 to 8.1	UT to Headwaters	River/Stream	503926	1.70 MILES	2016 5	Ohio River	Boone	6.40	8.10	38.94893	-84.64640	38.92785	-84.64521	2020
KY-1767	KY503926-5.3_01	Rename			South Fork Gunpowder Creek UT 0.0 to 2.5	Mouth to Headwaters	River/Stream	503926	2.50 MILES	2016 5	Ohio River	Boone	0.00	2.50	38.96089	-84.65686	38.97564	-84.62275	2020
KY-2721					South Fork Kentucky River 0.0 to 11.75	Mouth to Buck Creek	River/Stream	515545	11.75 MILES	2020 3	Kentucky River	Lee, Owsley	0.00	11.75	37.56996	-83.71085	37.47955	-83.67496	2020
KY-3021		Split	KY-2559	KY515545_01	South Fork Kentucky River 11.75 to 12.75	Buck Creek to Booneville Water & Sewer District	River/Stream	515545	1.00 MILES	2020 5	Kentucky River	Owsley	11.75	12.75	37.47955	-83.67496	37.46977	-83.67561	2020
KY-3023		Split	KY-2559	KY515545_01	South Fork Kentucky River 12.75 to 13.75	Booneville Water & Sewer District to 1 mile upstream	River/Stream	515545	1.00 MILES	2020 5	Kentucky River	Owsley	12.75	13.75	37.46977	-83.67561	37.46016	-83.67781	2020
KY-3022		Split	KY-2559	KY515545_01	South Fork Kentucky River 13.75 to 18.9	1 Mile Upstream of Booneville Water & Sewer District to Cow Creek	River/Stream	515545	5.15 MILES	2020 5	Kentucky River	Owsley	13.75	18.90	37.46016	-83.67781	37.44684	-83.64401	2020
KY-2722					South Fork Kentucky River 18.9 to 27.8	Cow Creek to Sexton Creek	River/Stream	515545	8.90 MILES	2020 3	Kentucky River	Owsley	18.90	27.80	37.44684	-83.64401	37.35900	-83.68198	2020
KY-1770	KY503932_03	Rename			South Fork Licking River 11.55 to 16.9	Fork Lick Creek to Crooked Creek	River/Stream	503932	5.35 MILES	2020 5	Licking River	Pendleton	11.55	16.90	38.60834	-84.40373	38.55866	-84.41827	2020
KY-1771	KY503932_04	Rename			South Fork Licking River 16.9 to 27.55	Crooked Creek to Raven Creek	River/Stream	503932	10.65 MILES	2000 2	Licking River	Harrison, Pendleton	16.90	27.55	38.55866	-84.41827	38.51483	-84.39123	2020
KY-1768	KY503932_01	Rename			South Fork Licking River 2.2 to 7.0	Falmouth to Short Creek	River/Stream	503932	4.80 MILES	2000 2	Licking River	Pendleton	2.20	7.00	38.66770	-84.33826	38.64773	-84.38109	2020
KY-1772	KY503932_05	Rename			South Fork Licking River 35.0 to 46.3	Indian Creek to Mill Creek	River/Stream	503932	11.30 MILES	2000 2	Licking River	Harrison	35.00	46.30	38.47246	-84.34020	38.40760	-84.28948	2020
KY-1773	KY503932_06	Rename			South Fork Licking River 51.05 to 52.05	Cynthiana Municipal Water Works intake to 1 mile upstream	River/Stream	503932	1.00 MILES	2006 2	Licking River	Harrison	51.05	52.05	38.37669	-84.30431	38.36722	-84.29670	2020
KY-1769	KY503932_02	Rename			South Fork Licking River 7.0 to 11.55	Short Creek to Fork Lick Creek	River/Stream	503932	4.55 MILES	2000 2	Licking River	Pendleton	7.00	11.55	38.64773	-84.38109	38.60834	-84.40373	2020
KY-1774	KY503933_01	Rename			South Fork Little Barren River 0.0 to 23.1	Mouth to Rogers Creek	River/Stream	503933	23.10 MILES	2008 4A	Green River	Metcalfe	0.00	23.10	37.12500	-85.63227	36.99511	-85.63813	2020
KY-1775	KY503933_02	Rename			South Fork Little Barren River 23.1 to 30.25	Rogers Creek to Moccasin Creek	River/Stream	503933	7.15 MILES	2008 5	Green River	Metcalfe	23.10	30.25	36.99492	-85.63783	36.93292	-85.58350	2020
KY-1608	KY503934_01	Rename			South Fork Little River 0.0 to 10.3	Mouth to Urban Area/UT from County Airport	River/Stream	503934	10.30 MILES	2020 5	Lower Cumberland River	Christian	0.00	10.30	36.80060	-87.51679	36.85522	-87.45482	2020
KY-1609	KY503934_02	Rename			South Fork Little River 10.3 to 20.3	Urban Area/UT from County Airport to Warrens Fork	River/Stream	503934	10.00 MILES	2012 5	Lower Cumberland River	Christian	10.30	20.30	36.85522	-87.45482	36.85977	-87.34970	2020
KY-1776	KY503934_03	Rename			South Fork Little River 21.3 to 26.1	UT to Headwaters	River/Stream	503934	4.80 MILES	2002 5	Lower Cumberland River	Christian	21.30	26.10	36.87223	-87.35251	36.91866	-87.32781	2020
KY-1777	KY503938_01	Rename			South Fork Nolin River 0.0 to 6.45	Mouth to Walters Creek	River/Stream	503938	6.45 MILES	2002 2	Green River	Larue	0.00	6.45	37.54605	-85.79702	37.51286	-85.74717	2020
KY-1778	KY503939_01	Rename			South Fork Panther Creek 0.0 to 2.4	Confluence with North Fork of Panther Creek to Shoemaker Branch	River/Stream	503939	2.40 MILES	2020 5	Green River	Daviess	0.00	2.40	37.70206	-87.09022	37.67157	-87.08842	2020
KY-1781	KY503939_04	Rename			South Fork Panther Creek 14.0 to 18.25	Deserter Creek to Carter Ditch	River/Stream	503939	4.25 MILES	2004 4A	Green River	Ohio	14.00	18.25	37.62451	-86.92610	37.61789	-86.85210	2020
KY-1779	KY503939_02	Rename			South Fork Panther Creek 2.4 to 9.55	Shoemaker Branch to Cane Run	River/Stream	503939	7.15 MILES	2002 5	Green River	Daviess	2.40	9.55	37.67157	-87.08842	37.64116	-86.97263	2020
KY-1780	KY503939_03	Rename			South Fork Panther Creek 9.55 to 14.0	Cane Run to Deserter Creek	River/Stream	503939	4.45 MILES	2002 5	Green River	Ohio, Daviess	9.55	14.00	37.64116	-86.97263	37.62451	-86.92610	2020
KY-1782	KY503941_01	Rename			South Fork Quicksand Creek 0.0 to 17.05	Mouth to Headwaters	River/Stream	503941	17.05 MILES	2004 5	Kentucky River	Breathitt	0.00	17.05	37.53793	-83.34180	37.51437	-83.13106	2020
KY-2560	KY515547_01	Rename			South Fork Red River 0.0 to 4.25	Mouth to Sand Lick Creek	River/Stream	515547	4.25 MILES	2000 4A	Kentucky River	Powell	0.00	4.25	37.82374	-83.75244	37.78067	-83.73356	2020
KY-1783	KY503943_01	Rename			South Fork Red River 0.0 to 5.3	Mouth to Adairville POTW	River/Stream	503943	5.30 MILES	2014 5	Lower Cumberland River	Logan	0.00	5.30	36.67284	-86.93134	36.66080	-86.85828	2020
KY-2561	KY515547_02	Rename			South Fork Red River 4.25 to 10.65	Sand Lick to Reservoir	River/Stream	515547	6.40 MILES	2000 4A	Kentucky River	Powell	4.25	10.65	37.78067	-83.73356	37.76177	-83.80011	2020
KY-2740					South Fork Rockcastle River 0.0 to 1.95	Mouth to Black Lick Branch	River/Stream	515548	1.95 MILES	2020 3	Upper Cumberland River	Jackson, Laurel	0.00	1.95	37.33576	-84.11903	37.31603	-84.10356	2020
KY-3025		Split	KY-2562	KY515548_01	South Fork Rockcastle River 1.95 to 5.25	Black Lick Branch to Jackson County Water Association	River/Stream	515548	3.30 MILES	2020 2	Upper Cumberland River	Jackson, Laurel	1.95	5.25	37.31603	-84.10356	37.29626	-84.09302	2020
KY-2563	KY515548_02	Rename			South Fork Rockcastle River 21.2 to 29.1	0.4 mile below SR 472 to Headwaters	River/Stream	515548	7.90 MILES	2020 5	Upper Cumberland River	Clay, Laurel	21.20	29.10	37.21010	-83.94697	37.13496	-83.94869	2020
KY-3024		Split	KY-2562	KY515548_01	South Fork Rockcastle River 5.25 to 5.8	Jackson County Water Association to White Oak Creek (end of OSRW)	River/Stream	515548	0.55 MILES	2020 2	Upper Cumberland River	Jackson, Laurel	5.25	5.80	37.29626	-84.09302	37.29096	-84.08801	2020
KY-1784	KY503945_01	Rename			South Fork Russell Creek 0.0 to 6.5	Mouth to Headwaters	River/Stream	503945	6.50 MILES	2008 2	Green River	Green	0.00	6.50	37.18170	-85.49613	37.11585	-85.53207	2020
KY-1785	KY503945-4.7_01	Rename			South Fork Russell Creek UT 0.0 to 0.6	Mouth to Headwaters	River/Stream	503945	0.60 MILES	2002 4A	Green River	Green	0.00	0.60	37.13323	-85.51955	37.13114	-85.50957	2020
KY-2564	KY515550_01	Rename			South Fork Station Camp Creek 0.0 to 9.75	mouth to Rock Lick Creek	River/Stream	515550	9.75 MILES	2010 2	Kentucky River	Jackson	0.00	9.75	37.53286	-83.90930	37.53936	-84.01078	2020
KY-2565	KY515550_02	Rename			South Fork Station Camp Creek 9.75 to 27.5	Rock Lick Creek to headwaters	River/Stream	515550	17.75 MILES	2002 2	Kentucky River	Jackson	9.75	27.50	37.53936	-84.01078	37.50805	-84.20565	2020
KY-3056					South Lake	Entire lake	Lake/Reservoir	665	97 ACRES	2020 3	Green River	Ohio			37.24758	-86.92499	37.26660	-86.90687	2020
KY-1786	KY503961_01	Rename			South Long Run 0.0 to 3.6	Mouth to Headwaters (Pond)	River/Stream	503961	3.60 MILES	2014 5	Salt River	Jefferson, Shelby	0.00	3.60	38.22464	-85.44062	38.21143	-85.40375	2020
KY-1787	KY503975_01	Rename			South Ruin Creek 0.7 to 5.7	North Fork Ruin Creek to Change in land use (forested)	River/Stream	503975	5.00 MILES	2016 5	Little Sandy River	Elliott	0.70	5.70	38.10077	-83.13810	38.08298	-83.20841	2020
KY-1788	KY503998_01	Rename			Southern Ditch 0.0 to 5.75	Mouth to Fishpool Creek	River/Stream	503998	5.75 MILES	1998 4A	Salt River	Jefferson	0.00	5.75	38.11666	-85.80148	38.13460	-85.70138	2020
KY-1789	KY503998_02	Rename			Southern Ditch 5.75 to 9.0	Fishpool Creek to Headwaters	River/Stream	503998	3.25 MILES	2014 4A	Salt River	Jefferson	5.75	9.00	38.13460	-85.70138	38.13118	-85.64703	2020
KY-1790	KY503998-1.1_01	Rename			Southern Ditch UT 0.0 to 2.8	Mouth to Headwaters	River/Stream	503998	2.80 MILES	2004 5	Salt River	Jefferson	0.00	2.80	38.12553	-85.78419	38.16009	-85.78817	2020
KY-55	KY2743101_00	Rename			Spa Lake	Dam to Upper Lake	Lake/Reservoir	2743101	241 ACRES	2020 2	Green River	Logan			36.94942	-87.02906	36.91570	-87.03814	2020
KY-2050	KY507343_01	Rename			Spears Creek 0.0 to 2.2	Mouth to Headwaters	River/Stream	507343	2.20 MILES	2016 4A	Kentucky River	Lincoln	0.00	2.20	37.48556	-84.83159	37.51081	-84.82487	2020
KY-1791	KY504043_01	Rename			Spears Creek 1.1 to 6.35	Herrington Lake backwaters to Headwaters	River/Stream	504043	5.25 MILES	2010 5	Kentucky River	Boyle	1.10	6.35	37.68181	-84.74589	37.65358	-84.80048	2020
KY-1792	KY504061_01	Rename			Spewing Camp Branch 0.0 to 3.2	Mouth to Headwaters	River/Stream	504061	3.20 MILES	2010 5	Big Sandy River	Floyd	0.00	3.20	37.43023	-82.73447	37.39808	-82.70933	2020
KY-1793	KY504085_00	Rename			Sportsman Club Lake (aka Spurlington Lake)	Dam to Upper Lake	Lake/Reservoir	504085	28 ACRES	2020 5	Green River	Taylor			37.38413	-85.25462	37.39169	-85.25283	2020
KY-2566	KY515610_01	Rename			Spring Creek 0.0 to 1.85	Mouth to Little Spring Creek	River/Stream	515610	1.85 MILES	2010 2	Kentucky River	Clay	0.00	1.85	37.06189	-83.54134	37.05561	-83.56302	2020
KY-1795	KY504124_01	Rename			Spring Creek 0.0 to 2.0	Mouth to Haskell Branch	River/Stream	504124	2.00 MILES	2012 5	Tennessee River	Graves	0.00	2.00	36.87130	-88.55002	36.85932	-88.57948	2020
KY-1794	KY504121_01	Rename			Spring Creek 14.4 to 16.4	KY/TN State Line to UT	River/Stream	504121	2.00 MILES	2008 2	Lower Cumberland River	Todd	14.40	16.40	36.64185	-87.21280	36.65557	-87.22060	2020
KY-1797	KY504128_01	Rename			Spring Creek 2.1 to 3.8	Dale Hollow Backwaters to Clear Fork Branch	River/Stream	504128	1.70 MILES	2008 2	Upper Cumberland River	Clinton	2.10	3.80	36.64072	-85.15556	36.64222	-85.13413	2020
KY-1799	KY504129_01	Rename			Spring Creek 3.0 to 3.5	Pipeline/road crossing to UT	River/Stream	504129	0.50 MILES	2002 5	Upper Cumberland River	Lyon	3.00	3.50	37.10708	-88.15623	37.10146	-88.15303	2020
KY-1796	KY504124_02	Rename			Spring Creek 3.6 to 5.4	Above UT to Headwaters (pond)	River/Stream	504124	1.80 MILES	2012 5	Tennessee River	Graves	3.60	5.40	36.85373	-88.60271	36.83149	-88.61276	2020
KY-1798	KY504128_02	Rename			Spring Creek 3.8 to 7.4	Clear Fork Branch to confluence of Smith Creek and Hays Creek	River/Stream	504128	3.60 MILES	2002 2	Upper Cumberland River	Clinton	3.80	7.40	36.64222	-85.13414	36.65324	-85.10666	2020
KY-1802	KY504137_01	Rename			Spring Fork Quicksand Creek 3.1 to 7.1	Hawes Fork to Oliver Branch	River/Stream	504137	4.00 MILES	2000 5	Kentucky River	Breathitt	3.10	7.10	37.57055	-83.09754	37.54757	-83.05746	2020
KY-2902					Springfield Reservoir	Entire Lake	Lake/Reservoir	504160	30 ACRES	2020 3	Salt River	Washington			37.67294	-85.25306	37.66742	-85.24705	2020
KY-2567	KY515614_01	Rename			Spruce Branch 0.0 to 1.05	Mouth to Headwaters	River/Stream	515614	1.05 MILES	2004 2	Kentucky River	Clay	0.00	1.05	36.95696	-83.53109	36.94927	-83.51566	2020
KY-2295	KY515617_01	Rename			Spruce Creek 0.0 to 1.8	Mouth to Upper and Lower Spruce Creeks	River/Stream	515617	1.80 MILES	2006 5	Licking River	Montgomery	0.00	1.80	37.95481	-83.81358	37.93659	-83.82466	2020
KY-1803	KY504179_01	Rename			Spruce Pine Fork 0.0 to 1.5	Mouth to UT	River/Stream	504179	1.50 MILES	2010 5	Licking River	Magoffin	0.00	1.50	37.66087	-83.13278	37.65461	-83.15478	2020
KY-1804	KY504191_01	Rename			Spurlock Creek 0.0 to 0.6	Mouth to MP 0.6	River/Stream	504191	0.60 MILES	2010 5	Big Sandy River	Floyd	0.00	0.60	37.53169	-82.74373	37.52698	-82.73570	2020
KY-1805	KY504191_02	Rename			Spurlock Creek 0.6 to 4.05	MP 0.6 to Headwaters	River/Stream	504191	3.45 MILES	2010 5	Big Sandy River	Floyd	0.60	4.05	37.52698	-82.73570	37.48737	-82.71863	2020
KY-1806	KY504192_01	Rename			Spurlock Creek 3.4 to 4.55	Conley Fork to Pitts Fork	River/Stream	504192	1.15 MILES	2016 5	Big Sandy River	Floyd	3.40	4.55	37.61142	-82.80676	37.59696	-82.80152	2020
KY-1807	KY504194_01	Rename			Spurlock Fork 0.15 to 2.30	Sansom Fork to Headwaters	River/Stream	504194	2.15 MILES	2016 5	Big Sandy River	Floyd	0.15	2.30	37.55046	-82.69179	37.52881	-82.71010	2020
KY-1808	KY504196_01	Rename			Sputzman Creek 1.3 to 4.4	UT to Headwaters	River/Stream	504196	3.10 MILES	2014 5	Green River	Henderson	1.30	4.40	37.67327	-87.47242	37.70625	-87.48968	2020
KY-1809	KY504196-3.55_01	Rename			Sputzman Creek UT 0.0 to 1.7	Mouth to Headwaters	River/Stream	504196	1.70 MILES	2014 5	Green River	Henderson	0.00	1.70	37.69820	-87.47774	37.71863	-87.48474	2020
KY-2296	KY515639_01	Rename			Squabble Creek 0.0 to 4.7	Mouth to Just Above Enoch Fork	River/Stream	515639	4.70 MILES	2004 5	Kentucky River	Perry	0.00	4.70	37.34597	-83.46883	37.32297	-83.52742	2020
KY-1810	KY504255_00	Rename			Stanford Reservoir	Entire Reservoir	Lake/Reservoir	504255	38 ACRES	2020 2	Kentucky River	Lincoln			37.48585	-84.67741	37.48514	-84.68458	2020
KY-1811	KY504266_01	Rename			Star Creek 0.0 to 0.6	Mouth to Discharge	River/Stream	504266	0.60 MILES	2010 3	Little Sandy River	Carter	0.00	0.60	38.34889	-82.78040	38.35237	-82.78979	2020
KY-1813	KY504284_01	Rename			State Road Fork 0.0 to 1.45	Mouth to Headwaters	River/Stream	504284	1.45 MILES	2010 5	Licking River	Magoffin	0.00	1.45	37.78256	-83.01212	37.79030	-82.99152	2020
KY-1812	KY504283_01	Rename			State Road Fork 0.0 to 4.45	Mouth to Headwaters	River/Stream	504283	4.45 MILES	2002 2	Kentucky River	Morgan, Wolfe	0.00	4.45	37.76422	-83.34575	37.74359	-83.28226	2020
KY-2855		Split	KY-2297	KY515669_01	Station Camp Creek 0.0 to 17.1	Mouth to Land use change	River/Stream	515669	17.10 MILES	2020 5	Kentucky River	Estill	0.00	17.10	37.69452	-83.97230	37.58261	-83.92802	2020
KY-2856		Split	KY-2297	KY515669_01	Station Camp Creek 17.1 to 21.4	Land Use Change (1.25 River Miles Upstream of Sparks Branch) to Land use change	River/Stream	515669	4.30 MILES	2016 5	Kentucky River	Jackson, Estill	17.10	21.40	37.58261	-83.92802	37.54599	-83.90929	2020
KY-2815					Station Camp Creek 21.4 to 22.9	Land Use Change to South Fork Station Camp Creek	River/Stream	515669	1.50 MILES	2020 3	Kentucky River	Jackson	21.40	22.90	37.54599	-83.91500	37.53287	-83.90929	2020
KY-1814	KY504289-0.2_01	Rename			Stave Branch UT 0.0 to 0.4	Mouth to Point of Discharge	River/Stream	504289	0.40 MILES	2020 3	Big Sandy River	Johnson	0.00	0.40	37.82481	-82.83690	37.82846	-82.84281	2020
KY-1815	KY504297_01	Rename			Steamill Branch 0.0 to 1.35	Mouth to I-75	River/Stream	504297	1.35 MILES	2016 5	Kentucky River	Grant	0.00	1.35	38.62851	-84.60226	38.63789	-84.58228	2020
KY-1816	KY504308_01	Rename			Steele Creek 0.0 to 2.55	Mouth to Headwaters	River/Stream	504308	2.55 MILES	2010 5	Big Sandy River	Floyd	0.00	2.55	37.44333	-82.80746	37.43593	-82.76889	2020
KY-2788		Split	KY-1817	KY504312_01	Steeles Run 0.0 to 4.2	Mouth to Unnamed Tributary (0.1 River Miles Upstream of PV-3002 Miss Alleged Drive)	River/Stream	504312	4.20 MILES	2020 5	Kentucky River	Woodford, Fayette	0.00	4.20	38.11099	-84.62871	38.06735	-84.59554	2020
KY-2789		Split	KY-1817	KY504312_01	Steeles Run 4.2 to 5.15	Unnamed Tributary (0.1 River Miles Upstream of PV-3002 Miss Alleged Drive) to Headwaters	River/Stream	504312	0.95 MILES	2020 4A	Kentucky River	Fayette	4.20	5.15	38.06735	-84.59554	38.06669	-84.57923	2020
KY-2629	KY516606_01	Rename			Steer Fork 0.0 to 2.7	Mouth to Headwaters	River/Stream	516606	2.70 MILES	2020 2	Kentucky River	Jackson	0.00	2.70	37.45466	-83.92700	37.42574	-83.94866	2020
KY-1818	KY504331_01	Rename			Stephens Branch 0.0 to 2.9	Mouth to Headwaters	River/Stream	504331	2.90 MILES	2010 5	Big Sandy River	Floyd	0.00	2.90	37.55869	-82.77242	37.55852	-82.81286	2020
KY-1819	KY504338_01	Rename			Stephens Creek 0.0 to 1.8	Mouth to UT	River/Stream	504338	1.80 MILES	2000 2	Ohio River	Gallatin	0.00	1.80	38.77690	-84.97263	38.75723	-84.97213	2020
KY-1820	KY504362_02	Rename			Stevens Creek 14.6 to 17.4	UT to UT of Stevens Creek	River/Stream	504362	2.80 MILES	2000 5	Kentucky River	Owen	14.60	17.40	38.58344	-84.78577	38.56327	-84.79465	2020
KY-1821	KY504371_01	Rename			Stevenson Branch 0.0 to 2.0	Mouth to Headwaters	River/Stream	504371	2.00 MILES	2008 5	Upper Cumberland River	Bell	0.00	2.00	36.62517	-83.73531	36.64201	-83.75835	2020
KY-3185					Stewart Branch 0.0 to 3.1	Mouth to Headwaters	River/Stream	515698	3.10 MILES	2020 2	Upper Cumberland River	Pulaski	0.00	3.10	37.15671	-84.48111	37.12948	-84.50669	2020
KY-3272					Stice Creek 1.3 to 5.1	English Rd. (CR-1060) to headwaters	River/Stream	504390	3.80 MILES	2020 5	Tennessee River	Marshall	1.30	5.10	36.96524	-88.30372	36.91751	-88.30328	2020
KY-1822	KY504390-0.1_01	Rename			Stice Creek UT 0.0 to 0.6	Mouth to Point of Discharge	River/Stream	504390	0.60 MILES	2012 3	Tennessee River	Marshall	0.00	0.60	36.98009	-88.31217	36.98038	-88.30164	2020
KY-2568	KY515715_01	Rename			Stillwater Creek 0.0 to 3.5	Mouth to Laurel Fork	River/Stream	515715	3.50 MILES	2006 5	Kentucky River	Wolfe	0.00	3.50	37.79463	-83.51325	37.76987	-83.49349	2020
KY-2569	KY515716_01	Rename			Stinking Creek 0.0 to 2.1	Mouth to Turkey Creek	River/Stream	515716	2.10 MILES	2002 5	Upper Cumberland River	Knox	0.00	2.10	36.83752	-83.81613	36.85626	-83.79860	2020
KY-2570	KY515716_02	Rename			Stinking Creek 11.3 to 17.6	Middle Fork of Stinking Creek to Acorn Fork	River/Stream	515716	6.30 MILES	2006 5	Upper Cumberland River	Knox	11.30	17.60	36.88589	-83.70745	36.92250	-83.64299	2020
KY-2571	KY515716_03	Rename			Stinking Creek 17.6 to 18.8	Acorn Fork to Alex Creek	River/Stream	515716	1.20 MILES	2008 2	Upper Cumberland River	Knox	17.60	18.80	36.92250	-83.64299	36.92375	-83.62277	2020
KY-3233					Stinking Creek 2.1 to 11.3	Turkey Creek to Middle Fork of Stinking Creek	River/Stream	515716	9.20 MILES	2020 5	Upper Cumberland River	Knox	2.10	11.30	36.85626	-83.79860	36.88589	-83.70745	2020
KY-2572	KY515718_01	Rename			Stinnett Creek 1.3 to 5.0	Land Use Change to Land Use Change	River/Stream	515718	3.70 MILES	2004 5	Kentucky River	Leslie	1.30	5.00	37.09108	-83.41272	37.07320	-83.45968	2020
KY-1823	KY504434_01	Rename			Stinson Creek 0.0 to 3.3	Mouth to Forested Watershed	River/Stream	504434	3.30 MILES	2010 5	Licking River	Magoffin	0.00	3.30	37.71280	-83.07047	37.67236	-83.07987	2020
KY-3170					Stone Quarry Creek 2.95 to 4.25	Green River Lake backwaters to pond at headwaters	River/Stream	504462	1.30 MILES	2020 4C	Green River	Taylor	2.95	4.25	37.30635	-85.33374	37.32116	-85.34467	2020
KY-2573	KY515729_01	Rename			Stonecoal Branch 0.0 to 2.75	Mouth to Headwaters	River/Stream	515729	2.75 MILES	2002 2	Licking River	Rowan	0.00	2.75	38.11454	-83.33994	38.15008	-83.34473	2020
KY-1824	KY504482_01	Rename			Stoner Creek 0.0 to 5.55	Mouth to Cooper Run	River/Stream	504482	5.55 MILES	2020 4A	Licking River	Bourbon	0.00	5.55	38.30585	-84.24087	38.27623	-84.27438	2020
KY-1826	KY504482_02-A	Rename			Stoner Creek 15.0 to 16.75	Paris to Paris Municipal Water Works	River/Stream	504482	1.75 MILES	2016 2	Licking River	Bourbon	15.00	16.75	38.22074	-84.24867	38.20458	-84.23800	2020
KY-1827	KY504482_03	Rename			Stoner Creek 16.75 to 17.3	Paris Municipal Water Works to Kennedy Creek	River/Stream	504482	0.55 MILES	2020 2	Licking River	Bourbon	16.75	17.30	38.20460	-84.23809	38.19892	-84.24242	2020
KY-3039		Split	KY-1828	KY504482_04	Stoner Creek 17.3 to 23.5	Kennedy Creek to Rogers Creek	River/Stream	504482	6.20 MILES	2016 4A	Licking River	Bourbon	17.30	23.50	38.19892	-84.24242	38.19188	-84.18032	2020
KY-1829	KY504482_04-A	Rename			Stoner Creek 23.5 to 30.1	Rogers Creek to Strodes Creek	River/Stream	504482	6.60 MILES	2016 2	Licking River	Bourbon	23.50	30.10	38.19188	-84.18032	38.15651	-84.16728	2020
KY-1830	KY504482_05	Rename			Stoner Creek 35.7 to 45.15	Indian Creek to Donaldson Creek	River/Stream	504482	9.45 MILES	2012 4A	Licking River	Bourbon	35.70	45.15	38.14730	-84.12390	38.10861	-84.11885	2020
KY-1831	KY504482_06	Rename			Stoner Creek 45.15 to 60.95	Donaldson Creek to Little Stoner Creek	River/Stream	504482	15.80 MILES	2012 2	Licking River	Bourbon, Clark	45.15	60.95	38.10861	-84.11885	38.04571	-84.09060	2020
KY-1825	KY504482_02	Rename			Stoner Creek 5.55 to 15.0	Cooper Run to Paris	River/Stream	504482	9.45 MILES	2012 4A	Licking River	Bourbon	5.55	15.00	38.27623	-84.27438	38.22074	-84.24868	2020
KY-2574	KY515733_01	Rename			Stoney Fork 0.0 to 2.3	Mouth to Wolf Pen Branch	River/Stream	515733	2.30 MILES	2000 5	Upper Cumberland River	Bell	0.00	2.30	36.82996	-83.53682	36.85757	-83.54881	2020
KY-1832	KY504500_01	Rename			Stony Creek 0.0 to 3.0	Mouth to Mile Point 3.0	River/Stream	504500	3.00 MILES	2000 5	Licking River	Nicholas	0.00	3.00	38.41630	-83.98654	38.40199	-84.01599	2020
KY-2887					Stony Fork 0.0 to 2.05	Mouth to Headwaters	River/Stream	504507	2.05 MILES	2020 3	Ohio River	Breckinridge	0.00	2.05	37.76832	-86.26254	37.74266	-86.25684	2020
KY-1833	KY504506_01	Rename			Stony Fork 0.0 to 5.4	Mouth to Coal Creek	River/Stream	504506	5.40 MILES	2000 5	Upper Cumberland River	Bell	0.00	5.40	36.61214	-83.74408	36.61230	-83.82667	2020
KY-1834	KY504539_01	Rename			Stovall Creek 0.0 to 3.3	Mouth to UT	River/Stream	504539	3.30 MILES	2020 2	Mississippi River	Ballard	0.00	3.30	36.92938	-89.00809	36.96231	-88.98358	2020
KY-2575	KY515746_01	Rename			Straight Creek 0.0 to 1.7	Mouth to Left Fork of Straight Creek	River/Stream	515746	1.70 MILES	2020 4A	Upper Cumberland River	Bell	0.00	1.70	36.76313	-83.69214	36.77387	-83.66898	2020
KY-1835	KY504549_01	Rename			Straight Creek 0.0 to 2.05	Mouth to Big Mandy Creek	River/Stream	504549	2.05 MILES	2000 5	Licking River	Morgan	0.00	2.05	37.95847	-83.18653	37.97815	-83.17153	2020
KY-1836	KY504550_01	Rename			Straight Creek 0.0 to 3.85	Mouth to Glancy Fork	River/Stream	504550	3.85 MILES	2004 5	Little Sandy River	Carter	0.00	3.85	38.26987	-82.91252	38.26407	-82.86412	2020
KY-2576	KY515746_02	Rename			Straight Creek 1.7 to 23.35	Left Fork of Straight Creek to Wilder Branch	River/Stream	515746	21.65 MILES	2008 5	Upper Cumberland River	Bell, Harlan	1.70	23.35	36.77387	-83.66898	36.89859	-83.35847	2020
KY-1837	KY504559_01	Rename			Straight Fork 0.0 to 0.9	Mouth to Headwaters	River/Stream	504559	0.90 MILES	2010 5	Big Sandy River	Martin	0.00	0.90	37.73733	-82.57065	37.74963	-82.57106	2020
KY-2577	KY515751_01	Rename			Straight Fork 0.0 to 1.95	Mouth to Mosby Creek	River/Stream	515751	1.95 MILES	2002 2	Ohio River	Lewis	0.00	1.95	38.48423	-83.28806	38.46206	-83.30113	2020
KY-1838	KY504571_01	Rename			Stratton Branch 0.55 to 2.0	Reservoir Backwaters to Headwaters	River/Stream	504571	1.45 MILES	2010 5	Big Sandy River	Floyd	0.55	2.00	37.70018	-82.74048	37.68135	-82.74839	2020
KY-3318		Split	KY-1841	KY504593_03	Strodes Creek 19.3 to 22.15	Hoods Creek to UT	River/Stream	504593	2.85 MILES	2020 5	Licking River	Clark	19.30	22.15	38.06096	-84.18633	38.03212	-84.19540	2020
KY-1839	KY504593_01	Rename			Strodes Creek 2.7 to 7.95	Green Creek to Pretty Run	River/Stream	504593	5.25 MILES	2020 5	Licking River	Bourbon	2.70	7.95	38.13979	-84.18031	38.11673	-84.16065	2020
KY-3317		Split	KY-1841	KY504593_03	Strodes Creek 22.15 to 26.6	UT to Headwaters	River/Stream	504593	4.45 MILES	2020 5	Licking River	Clark	22.15	26.60	38.03212	-84.19540	37.99422	-84.23621	2020
KY-1840	KY504593_02	Rename			Strodes Creek 7.95 to 19.3	Pretty Run to Hoods Creek	River/Stream	504593	11.35 MILES	2020 5	Licking River	Bourbon, Clark	7.95	19.30	38.11673	-84.16064	38.06096	-84.18633	2020
KY-3316		Split	KY-1842	KY504593-22.2_01	Strodes Creek UT 0.0 to 1.35	Mouth to UT	River/Stream	504593	1.35 MILES	2020 5	Licking River	Clark	0.00	1.35	38.03213	-84.19538	38.01637	-84.18992	2020
KY-3315		Split	KY-1842	KY504593-22.2_01	Strodes Creek UT 1.35 to 3.75	UT to Headwaters	River/Stream	504593	2.40 MILES	2020 5	Licking River	Clark	1.35	3.75	38.01637	-84.18992	37.99583	-84.16086	2020
KY-2578	KY515765_01	Rename			Stump Cave Branch 0.0 to 2.5	Mouth to Headwaters	River/Stream	515765	2.50 MILES	1998 4A	Kentucky River	Powell	0.00	2.50	37.76532	-83.73831	37.73244	-83.73957	2020
KY-2723					Sturgeon Creek 1.3 to 8.0	Duck Fork to Cooperas Cave Branch	River/Stream	515768	6.70 MILES	2020 3	Kentucky River	Lee	1.30	8.00	37.53576	-83.78177	37.51194	-83.81972	2020
KY-2724					Sturgeon Creek 12.2 to 13.7	Wild Dog Creek to Little Sturgeon Creek	River/Stream	515768	1.50 MILES	2020 3	Kentucky River	Owsley	12.20	13.70	37.48730	-83.82319	37.47851	-83.81356	2020
KY-2579	KY515768_01	Rename			Sturgeon Creek 8.0 to 12.2	Cooperas Cave Branch to Wild Dog Creek	River/Stream	515768	4.20 MILES	2004 5	Kentucky River	Lee	8.00	12.20	37.51194	-83.81972	37.48730	-83.82319	2020
KY-1843	KY504623_01	Rename			Sudduth Branch 0.0 to 2.6	Mouth to Headwaters	River/Stream	504623	2.60 MILES	2010 2	Kentucky River	Franklin	0.00	2.60	38.23788	-84.98147	38.27154	-84.99317	2020
KY-2580	KY515781_01	Rename			Sugar Camp Branch 0.0 to 1.4	Mouth to Headwaters	River/Stream	515781	1.40 MILES	2006 5	Upper Cumberland River	Pulaski	0.00	1.40	37.15648	-84.32499	37.14291	-84.34207	2020

KY-1847	KY504650_01	Rename			Sugar Creek 0.0 to 1.4	Mouth to Headwaters	River/Stream	504650	1.40	MILES	2000	5	Mississippi River	Ballard	0.00	1.40	36.95217	-88.82653	36.97100	-88.82587	2020
KY-1846	KY504652_01	Rename			Sugar Creek 0.0 to 3.9	Mouth to Unnamed Reservoir	River/Stream	504652	3.90	MILES	2000	2	Mississippi River	Graves	0.00	3.90	36.86905	-88.54781	36.87608	-88.49917	2020
KY-1850	KY504656_01	Rename			Sugar Creek 0.0 to 5.3	Mouth to Headwaters	River/Stream	504656	5.30	MILES	2004	4A	Tradewater River	Hopkins	0.00	5.30	37.29717	-87.58112	37.25499	-87.54605	2020
KY-2581	KY515789_01	Rename			Sugar Creek 0.6 to 5.45	Land Use Change (Residential) to Headwaters	River/Stream	515789	4.85	MILES	2006	2	Kentucky River	Leslie, Clay	0.60	5.45	37.11857	-83.55223	37.12553	-83.49411	2020
KY-1848	KY504654_01	Rename			Sugar Creek 1.3 to 1.9	Land Use Change to SR 91 Bridge	River/Stream	504654	0.60	MILES	2002	5	Lower Cumberland River	Christian	1.30	1.90	36.99853	-87.68458	37.00599	-87.68201	2020
KY-1849	KY504655_01	Rename			Sugar Creek 2.2 to 6.9	Lick Creek to UT above KY 2232 (Sugar Creek Road)	River/Stream	504655	4.70	MILES	2012	5	Lower Cumberland River	Livingston	2.20	6.90	37.17347	-88.26578	37.13038	-88.28354	2020
KY-3252		Split	KY-1844	KY504651_01	Sugar Creek 2.4 to 3.15	Kentucky Lake Backwaters (0.05 River Miles Upstream of KY732 Irvine Cobb Road) to CR-1014 Old Newburg Road	River/Stream	504651	0.75	MILES	2020	5	Lower Cumberland River	Calloway	2.40	3.15	36.65222	-88.14606	36.65780	-88.15776	2020
KY-3253					Sugar Creek 3.15 to 5.65	CR-1014 Old Newburg Road to Headwaters	River/Stream	504651	2.50	MILES	2020	4C	Tennessee River	Calloway	3.15	5.65	36.65780	-88.15776	36.67141	-88.18734	2020
KY-1851	KY504657_01	Rename			Sugar Creek 4.6 to 5.9	West Fork Sugar Creek to East Fork Sugar Creek	River/Stream	504657	1.30	MILES	2004	5	Kentucky River	Garrard	4.60	5.90	37.69149	-84.57458	37.67944	-84.56144	2020
KY-1845	KY504651-2.0_01	Rename			Sugar Creek UT 0.0 to 3.3	Mouth to Headwaters	River/Stream	504651	3.30	MILES	2004	2	Tennessee River	Calloway	0.00	3.30	36.64744	-88.14432	36.63401	-88.16966	2020
KY-1852	KY504712_01	Rename			Sugg Creek 0.0 to 1.45	Mouth to UT	River/Stream	504712	1.45	MILES	2004	5	Ohio River	Union	0.00	1.45	37.66482	-87.99661	37.66402	-87.96874	2020
KY-1853	KY504726_01	Rename			Sulphur Branch 0.0 to 3.0	Mouth to Pond	River/Stream	504726	3.00	MILES	2014	3	Green River	Edmonson	0.00	3.00	37.12892	-86.26931	37.11098	-86.22086	2020
KY-1864	KY504735_01	Rename			Sulphur Branch 0.0 to 1.6	Mouth to Greens Fork	River/Stream	504735	1.60	MILES	2000	5	Kentucky River	Henry	0.00	1.60	38.50088	-85.02443	38.48579	-85.02334	2020
KY-1862	KY504734_01	Rename			Sulphur Creek 0.0 to 10.7	Mouth to Butler Creek	River/Stream	504734	10.70	MILES	2008	4A	Green River	Adair	0.00	10.70	37.10453	-85.19463	37.11888	-85.19402	2020
KY-1856	KY504729_01	Rename			Sulphur Creek 0.0 to 6.8	Mouth to Beechrot Branch	River/Stream	504729	6.80	MILES	2016	5	Salt River	Washington, Anderson	0.00	6.80	37.88134	-85.09950	37.89267	-85.04584	2020
KY-1861	KY504731_01	Rename			Sulphur Creek 0.5 to 2.85	Little Sulphur Creek to Baxter Branch	River/Stream	504731	2.35	MILES	2002	2	Upper Cumberland River	Monroe	0.50	2.85	36.68445	-85.57250	36.66327	-85.60582	2020
KY-1854	KY504728_01	Rename			Sulphur Creek 1.7 to 5.2	Reservoir Backwaters to Headwaters	River/Stream	504728	3.50	MILES	2012	5	Upper Cumberland River	Clinton	1.70	5.20	36.64784	-85.20342	36.68408	-85.17166	2020
KY-1863	KY504734_02	Rename			Sulphur Creek 10.7 to 15.4	Butler Creek to Hawk Branch	River/Stream	504734	4.70	MILES	2008	2	Green River	Adair	10.70	15.40	37.11888	-85.19402	37.14381	-85.13737	2020
KY-1860	KY504730_01	Rename			Sulphur Creek 5.3 to 8.3	Dale Hollow Reservoir to Headwaters	River/Stream	504730	3.00	MILES	2006	2	Upper Cumberland River	Cumberland	5.30	8.30	36.66656	-85.35111	36.68646	-85.39160	2020
KY-1857	KY504729_02	Rename			Sulphur Creek 6.8 to 10.0	Beechrot Branch Confluence to Cheese Lick and Brush Creek Confluence	River/Stream	504729	3.20	MILES	2016	5	Salt River	Mercer, Washington, Anderson	6.80	10.00	37.89267	-85.04584	37.88844	-85.02061	2020
KY-1859	KY504729-0.75_01	Rename			Sulphur Creek UT 0.0 to 1.2	Mouth to end of forested reach / Bluegrass Parkway	River/Stream	504729	1.20	MILES	2016	5	Salt River	Anderson, Washington	0.00	1.20	37.88763	-85.09435	37.89695	-85.10169	2020
KY-1855	KY504728-2.0_01	Rename			Sulphur Creek UT 0.0 to 2.1	Mouth to Headwaters	River/Stream	504728	2.10	MILES	2012	5	Upper Cumberland River	Clinton	0.00	2.10	36.65065	-85.20102	36.65546	-85.22080	2020
KY-1858	KY504729-0.1-0.75_01	Rename			Sulphur Creek UT of UT 0.0 to 0.7	Mouth to UT of Forested Reach	River/Stream	504729	0.70	MILES	2016	2	Salt River	Anderson	0.00	0.70	37.88903	-85.09514	37.89877	-85.09422	2020
KY-1865	KY504737_01	Rename			Sulphur Fork Creek 0.0 to 5.2	Mouth to Above Eubanks Ford	River/Stream	504737	5.20	MILES	2004	2	Green River	Allen, Simpson	0.00	5.20	36.74780	-86.40979	36.69342	-86.41453	2020
KY-1866	KY504737_02	Rename			Sulphur Fork Creek 5.2 to 7.9	Above Eubanks Ford to (0.1Miles) below Borens Ford	River/Stream	504737	2.70	MILES	2004	2	Green River	Allen, Simpson	5.20	7.90	36.69342	-86.41453	36.66295	-86.41295	2020
KY-1867	KY504743_01	Rename			Sulphur Lick Creek 0.0 to 5.2	Mouth to Headwaters	River/Stream	504743	5.20	MILES	2008	2	Kentucky River	Franklin	0.00	5.20	38.28753	-84.80238	38.30559	-84.74448	2020
KY-1868	KY504760_01	Rename			Sulphur Spring Creek 0.0 to 6.6	Mouth to Neely Branch	River/Stream	504760	6.60	MILES	2014	5	Lower Cumberland River	Simpson	0.00	6.60	36.69043	-86.74799	36.71944	-86.67001	2020
KY-2888					Sulphur Spring Creek 6.6 to 9.15	Neely Branch to Headwaters	River/Stream	504760	2.55	MILES	2020	3	Lower Cumberland River	Simpson	6.60	9.15	36.71944	-86.67001	36.74759	-86.65670	2020
KY-1869	KY504792_01	Rename			Sunfish Creek 6.8 to 10.35	Above UT to UT (Forested Riparian Zone begins)	River/Stream	504792	3.55	MILES	2004	5	Green River	Grayson, Edmonson	6.80	10.35	37.31980	-86.37602	37.35970	-86.39697	2020
KY-1870	KY504837_00	Rename			Swan Pond	Entire Lake	Lake/Reservoir	504837	200	ACRES	2012	2	Mississippi River	Ballard			37.00509	-89.11650	37.01945	-89.12034	2020
KY-1871	KY504845_01	Rename			Sweepstakes Branch 1.1 to 4.05	0.1 Miles below Bratcher Hill Road Crossing to Headwaters	River/Stream	504845	2.95	MILES	2002	5	Green River	Daviess	1.10	4.05	37.65809	-86.98704	37.69492	-86.99389	2020
KY-2582	KY515831_01	Rename			Sweet Lick Branch 0.0 to 2.5	Mouth to Headwaters	River/Stream	515831	2.50	MILES	2010	5	Kentucky River	Estill	0.00	2.50	37.71515	-83.98315	37.72289	-83.95322	2020
KY-2583	KY515834_01	Rename			Swift Camp Creek 0.0 to 7.5	Mouth to Rockbridge Fork	River/Stream	515834	7.50	MILES	2020	5	Kentucky River	Wolfe	0.00	7.50	37.82022	-83.57358	37.76947	-83.56111	2020
KY-2584	KY515834_02	Rename			Swift Camp Creek 7.5 to 14.05	Rockbridge Fork to Headwaters	River/Stream	515834	6.55	MILES	2020	4A	Kentucky River	Wolfe	7.50	14.05	37.76944	-83.56111	37.72386	-83.57172	2020
KY-2585	KY515834-11.9_01	Rename			Swift Camp Creek UT 0.0 to 2.2	Mouth to Headwaters	River/Stream	515834	2.20	MILES	2016	5	Kentucky River	Wolfe	0.00	2.20	37.73228	-83.54828	37.73410	-83.57504	2020
KY-1872	KY504864_01	Rename			Sycamore Branch 0.0 to 1.6	Mouth to Below UT	River/Stream	504864	1.60	MILES	2004	5	Green River	Edmonson	0.00	1.60	37.27879	-86.33362	37.27317	-86.31091	2020
KY-1873	KY504877_01	Rename			Sycamore Creek 0.0 to 3.8	Johns Creek to Forested Reach	River/Stream	504877	3.80	MILES	2010	5	Big Sandy River	Pike	0.00	3.80	37.62878	-82.55111	37.61739	-82.49300	2020
KY-3234					Sycamore Creek 0.05 to 5.65	South Fork Licking River backwater to headwaters	River/Stream	504878	5.60	MILES	2020	3	Licking River	Harrison	0.05	5.65	38.43412	-84.29038	38.43626	-84.21668	2020
KY-1874	KY504894_00	Rename			Sympson Lake	Entire Reservoir	Lake/Reservoir	504894	143	ACRES	2020	2	Salt River	Nelson			37.80658	-85.50869	37.82688	-85.51178	2020
KY-1875	KY504925-3.3_01	Rename			Tallow Creek UT 0.0 to 1.7	Mouth to Headwaters	River/Stream	504925	1.70	MILES	2008	2	Green River	Taylor	0.00	1.70	37.43495	-85.16449	37.45290	-85.17787	2020
KY-1876	KY504931_01	Rename			Tampa Branch 0.0 to 2.15	Mouth to unnamed tributary	River/Stream	504931	2.15	MILES	2016	4A	Green River	Hart	0.00	2.15	37.41621	-85.80151	37.40766	-85.77023	2020
KY-2586	KY515857-0.6_01	Rename			Tanyard Branch UT 1.0 to 1.9	Legacy Mining to Mile Point 1.9	River/Stream	515857	0.90	MILES	2004	2	Kentucky River	Clay	1.00	1.90	37.19647	-83.89482	37.19865	-83.90455	2020
KY-1877	KY504972_01	Rename			Tate Creek 0.0 to 6.35	Mouth to UT	River/Stream	504972	6.35	MILES	2008	5	Kentucky River	Madison	0.00	6.35	37.84837	-84.43428	37.78500	-84.39764	2020
KY-1878	KY504972_02	Rename			Tate Creek 6.6 to 11.4	Shallowford Creek to UT / Richmond Tate Creek POTW	River/Stream	504972	4.80	MILES	2000	2	Kentucky River	Madison	6.60	11.40	37.78258	-84.38866	37.76454	-84.32754	2020
KY-1879	KY505019_01	Rename			Taylor Fork 0.0 to 4.0	Mouth to Forested Riparian Zone	River/Stream	505019	4.00	MILES	2004	5	Green River	Grayson	0.00	4.00	37.42692	-86.27894	37.47721	-86.29103	2020
KY-1880	KY505023_00	Rename			Taylor Fork Lake (aka Wilgreen Lake)	Dam to Lake Boundary	Lake/Reservoir	505023	138	ACRES	2020	2	Kentucky River	Madison			37.70346	-84.35701	37.71894	-84.32932	2020
KY-51	KY2571206_00	Rename			Taylorsville Lake	Entire Reservoir	Lake/Reservoir	2571206	2941	ACRES	2020	2	Salt River	Spencer, Nelson, Anderson			38.00370	-85.30645	37.97026	-85.12860	2020
KY-116	KY485704_01	Rename			Ten Mile Creek 0.0 to 3.0	Mouth to Arnolds Creek	River/Stream	485704	3.00	MILES	2016	5	Kentucky River	Grant	0.00	3.00	38.71565	-84.75444	38.73417	-84.73632	2020
KY-117	KY485704_02	Rename			Ten Mile Creek 3.0 to 11.9	Arnolds Creek to Bullock Pen Creek	River/Stream	485704	8.90	MILES	2014	4A	Kentucky River	Grant	3.00	11.90	38.73417	-84.73632	38.77060	-84.65935	2020
KY-1881	KY505071_01	Rename			Tenmile Creek 0.05 to 1.2	Ohio River Backwaters to Land Use Changes	River/Stream	505071	1.15	MILES	2006	5	Ohio River	Campbell	0.05	1.20	39.00040	-84.30874	38.99333	-84.32249	2020
KY-2649	KY517033-1.0-48.4_01	Rename			Tennessee River (Kentucky Lake) UT of UT 0.15 to 0.8	Embayment to UT	River/Stream	517033	0.65	MILES	2006	5	Tennessee River	Marshall	0.15	0.80	36.69427	-88.10079	36.70013	-88.10849	2020
KY-2645	KY517033_01	Rename			Tennessee River 1.1 to 4.2	Island Creek to Clarks River	River/Stream	517033	3.10	MILES	2020	5	Tennessee River	McCracken, Livingston	1.10	4.20	37.07328	-88.58420	37.04921	-88.54145	2020
KY-2647	KY517033_03	Rename			Tennessee River 11.4 to 21.4	Above Mud Creek to I-24 Bridge	River/Stream	517033	10.00	MILES	2002	2	Tennessee River	Livingston, Marshall	11.40	21.40	37.04732	-88.43452	37.02537	-88.28466	2020
KY-2648	KY517033_04	Rename			Tennessee River 21.4 to 22.7	Above I-24 Bridge to Kentucky Lake Dam	River/Stream	517033	1.30	MILES	2006	4C	Tennessee River	Livingston, Marshall	21.40	22.70	37.02536	-88.28465	37.01547	-88.26636	2020
KY-2646	KY517033_02	Rename			Tennessee River 4.2 to 9.9	Clarks River to Cypress Creek	River/Stream	517033	5.70	MILES	2012	5	Tennessee River	Livingston, McCracken, Marshall	4.20	9.90	37.04921	-88.54145	37.03236	-88.45405	2020
KY-2818					Tennessee River 9.9 to 11.4	Cypress Creek to Above Mud Creek	River/Stream	517033	1.50	MILES	2020	3	Tennessee River	Livingston, Marshall	9.90	11.40	37.03236	-88.45405	37.04732	-88.43452	2020
KY-1882	KY505081_01	Rename			Terrapin Creek 2.8 to 7.0	KY/TN State Line to East Fork of Terrapin Creek	River/Stream	505081	4.20	MILES	2020	5	Mississippi River	Graves	2.80	7.00	36.50116	-88.49263	36.55040	-88.52494	2020
KY-3236					Terrapin Creek UT of UT 0.0 to 2.65	Mouth to Headwaters	River/Stream	505081	2.65	MILES	2020	5	Mississippi River	Graves	0.00	2.65	36.52109	-88.50771	36.51727	-88.54475	2020
KY-2790		Split	KY-1883	KY505187_01	Thompson Branch 0.0 to 0.3	Mouth to Webb Branch	River/Stream	505187	0.30	MILES	2020	5	Green River	Simpson	0.00	0.30	36.66123	-86.50066	36.65809	-86.49862	2020
KY-2791		Split	KY-1883	KY505187_01	Thompson Branch 0.3 to 1.5	Mouth to KY/TN State Line	River/Stream	505187	1.20	MILES	2008	2	Green River	Simpson	0.30	1.50	36.65809	-86.49862	36.65203	-86.47974	2020
KY-1884	KY505206_01	Rename			Thompson Creek 0.0 to 9.3	Mouth to Indian Creek Confluence	River/Stream	505206	9.30	MILES	2012	5	Salt River	Washington, Mercer	0.00	9.30	37.85567	-85.03830	37.85126	-84.97896	2020
KY-1885	KY505207_01	Rename			Thompson Fork 0.0 to 1.0	Mouth to Headwaters	River/Stream	505207	1.00	MILES	2020	2	Big Sandy River	Floyd	0.00	1.00	37.68497	-82.66762	37.67509	-82.67561	2020
KY-1886	KY505232_01	Rename			Three Forks Creek 0.0 to 7.8	Mouth to UT of Three Forks Creek	River/Stream	505232	7.80	MILES	2000	5	Kentucky River	Grant, Owen	0.00	7.80	38.56830	-84.67789	38.51959	-84.64465	2020
KY-1887	KY505240_01	Rename			Three Prong Branch 0.0 to 5.8	Mouth to Madden Fork	River/Stream	505240	5.80	MILES	2004	2	Tygarts Creek	Greenup	0.00	5.80	38.46716	-83.05023	38.51074	-83.13010	2020
KY-1888	KY505247_01	Rename			Threelick Fork 0.0 to 3.3	Mouth to Headwaters	River/Stream	505247	3.30	MILES	2004	5	Green River	Casey	0.00	3.30	37.42442	-84.85504	37.39752	-84.81106	2020
KY-1889	KY505251_01	Rename			Tibbs Creek 0.1 to 4.8	Licking River Backwaters to Headwaters	River/Stream	505251	4.70	MILES	2016	5	Licking River	Campbell	0.10	4.80	39.05084	-84.43249	39.02716	-84.45473	2020
KY-149	KY2764417_01	Rename			Tiger Ditch 0.0 to 0.8	Mouth to UT	River/Stream	2764417	0.80	MILES	2014	5	Ohio River	Henderson	0.00	0.80	37.81391	-87.57330	37.81657	-87.55948	2020
KY-1890	KY505301_01	Rename			Tioga Creek 0.0 to 2.55	Mouth to Headwaters	River/Stream	505301	2.55	MILES	2006	5	Ohio River	Hardin	0.00	2.55	37.98129	-85.99290	37.96141	-85.97414	2020
KY-1891	KY506099_00	Rename			Tom Wallace Lake	Entire Reservoir	Lake/Reservoir	505339	6	ACRES	2008	2	Salt River	Jefferson			38.08597	-85.77229	38.08443	-85.77503	2020
KY-1892	KY505346_01	Rename			Toms Branch 0.0 to 1.65	Mouth to Headwaters	River/Stream	505346	1.65	MILES	2020	2	Big Sandy River	Pike	0.00	1.65	37.26119	-82.45249	37.24747	-82.46381	2020
KY-1893	KY505352_01	Rename			Toms Branch 0.0 to 8.3	Mouth to Frogpoey Creek	River/Stream	505352	8.30	MILES	2016	5	Big Sandy River	Johnson	0.00	8.30	37.85164	-82.73224	37.88982	-82.80640	2020
KY-17	KY1699857_01	Rename			Town Branch 0.0 to 3.35	Mouth to Headwaters	River/Stream	1699857	3.35	MILES	2016	5	Licking River	Bath	0.00	3.35	38.16223	-83.95810	38.19849	-83.92647	2020
KY-1894	KY505381_01	Rename			Town Branch 0.0 to 3.95	Mouth to Headwaters	River/Stream	505381	3.95	MILES	2002	4A	Licking River	Fleming	0.00	3.95	38.40750	-83.71690	38.45405	-83.74850	2020
KY-1895	KY505385_01	Rename			Town Branch 0.0 to 6.3	Mouth to Headwaters	River/Stream	505385	6.30	MILES	2008	5	Green River	Logan	0.00	6.30	36.88306	-86.86780	36.82027	-86.90779	2020
KY-1897	KY505386_01	Rename			Town Branch 0.0 to 9.2	Mouth to Wolf Run	River/Stream	505386	9.20	MILES	2016	5	Kentucky River	Woodford, Scott, Fayette	0.00	9.20	38.11343	-84.62945	38.07359	-84.55354	2020
KY-1899	KY505386_04	Rename			Town Branch 10.8 to 12.45	Lexington WWTP to headwaters	River/Stream	505386	1.65	MILES	2010	5	Kentucky River	Fayette	10.80	12.45	38.06089	-84.53145	38.05152	-84.50562	2020
KY-1898	KY505386_02	Rename			Town Branch 9.2 to 10.8	Confluence with Wolf Run to Lexington WWTP outfall	River/Stream	505386	1.60	MILES	2010	5	Kentucky River	Fayette	9.20	10.80	38.07359	-84.55354	38.06091	-84.53149	2020
KY-1896	KY505393_01	Rename			Town Creek 0.0 to 3.6	Mouth to Headwaters	River/Stream	505393	3.60	MILES	2016	5	Kentucky River	Henry	0.00	3.60	38.43089	-85.11916	38.43051	-85.16151	2020
KY-1900	KY505392_01	Rename			Town Fork 0.0 to 4.15	Mouth to Headwaters	River/Stream	505392	4.15	MILES	2002	2	Salt River	Nelson	0.00	4.15	37.79272	-85.47519	37.83482	-85.43841	2020
KY-3300					Town Creek 3.6 to 7.7	New Castle STP to pond near headwaters	River/Stream	505393	4.10	MILES	2020	5	Kentucky River	Henry	3.60	7.70	38.43051	-85.16151	38.38213	-85.18268	2020
KY-3306					Town Fork 0.0 to 1.85	Mouth to Nicholasville Sewer Department	River/Stream	505395	1.85	MILES	2020	5	Kentucky River	Jessamine	0.00	1.85	37.85311	-84.62252	37.84455	-84.60370	2020
KY-3307					Town Fork 1.85 to 8.15	Nicholasville Sewer Department to pond near headwaters	River/Stream	505395	6.30	MILES	2020	3	Kentucky River	Jessamine	1.85	8.15	37.84455	-84.60370	37.91161	-84.56915	2020
KY-1902	KY505401_01	Rename			Townsend Creek 0.0 to 3.0	Mouth to UT	River/Stream	505401	3.00	MILES	2020	5	Licking River	Harrison, Bourbon	0.00	3.00	38.31526	-84.27891	38.31324	-84.30652	2020
KY-1905	KY505401_04	Rename			Townsend Creek 10.05 to 11.85	UT to Hawkins-Cummins Road	River/Stream	505401	1.80	MILES	2012	5	Licking River	Bourbon	10.05	11.85	38.26678	-84.35984	38.24934	-84.37835	2020
KY-1906	KY505401_05	Rename			Townsend Creek 11.85 to 16.05	Hawkins-Cummins Road to Headwaters	River/Stream	505401	4.20	MILES	2012	4A	Licking River	Bourbon	11.85	16.05	38.24934	-84.37835	38.20869	-84.39530	2020
KY-1903	KY505401_02	Rename			Townsend Creek 3.0 to 4.9	UT to Silas Creek	River/Stream	505401	1.90	MILES	2012	4A	Licking River	Bourbon, Harrison	3.00	4.90	38.31324	-84.30652	38.29799	-84.31718	2020
KY-1904	KY505401_03	Rename			Townsend Creek 4.9 to 10.05	Silas Creek to UT	River/Stream	505401	5.15	MILES	2020	5	Licking River	Bourbon	4.90	10.05	38.29799	-84.31718	38.26678	-84.36076	2020
KY-1901	KY505401-2.9_01	Rename			Townsend Creek UT 0.0 to 0.2	Mouth to WWTP Outfall Ditch	River/Stream	505401	0.20	MILES	2016	5	Licking River	Bourbon	0.00	0.20	38.31631	-84.30522	38.31400	-84.30556	2020
KY-2587	KY516007_01	Rename			Trace Branch 0.0 to 2.0	Mouth to Headwaters (Basin)	River/Stream	516007	2.00	MILES	1998	2	Upper Cumberland River	Knox	0.00	2.00	36.91914	-83.64866	36.89122	-83.61955	2020
KY-1908	KY505413_01	Rename			Trace Branch 1.6 to 2.6	1 mile downstream of discharge to Point of Discharge	River/Stream	505413	1.00	MILES	2014	3	Tradewater River	Hopkins	1.60	2.60	37.31900	-87.71184	37.30621	-87.70999	2020
KY-2701					Trace Creek 0.0 to 1.1	Mouth to 0.15 miles upstream of channelization @ KY 301	River/Stream	505419	1.10	MILES	2020	3	Tennessee River	Graves	0.00	1.10	36.84213	-88.53168	36.82896	-88.54066	2020
KY-1910	KY505424_01	Rename			Trace Creek 0.1 to 4.6	Wolf Creek to Stone Branch	River/Stream	505424	4.50	MILES	2006	5	Ohio River	Lewis	0.10	4.60	38.54393	-83.21889	38.49088	-83.21068	2020
KY-2735		Split	KY-1909	KY505419_01	Trace Creek 1.1 to 3.3	0.15 miles upstream of channelization @ KY 301 to Neely Branch	River/Stream	505419	2.20	MILES	2012	4A	Tennessee River	Graves	1.10	3.30	36.82896	-88.54066	36.80975	-88.56009	2020
KY-2734		Split	KY-1909	KY505419_01	Trace Creek 3.3 to 5.9	Neely Branch to Headwaters	River/Stream	505419	2.60	MILES	2012	4A	Tennessee River	Graves	3.30	5.90	36.80975	-88.56009	36.77824	-88.57508	2020
KY-3264					Trace Fork 0.0 to 1.25	Mouth to Campbellsville City Reservoir dam	River/Stream	505442	1.25	MILES	2020	5	Green River	Taylor	0.00	1.25	37.35627	-85.36192	37.35572	-85.34267	2020
KY-1911	KY505437_01	Rename			Trace Fork 0.0 to 3.2	Licking River to Right Fork Trace Fork	River/Stream	505437	3.20	MILES	2000	5	Licking River	Magoffin	0.00	3.20	37.60097	-82.96082	37.57207	-82.97956	2020
KY-1912	KY505441_01	Rename			Trace Fork 1.2 to 3.8	Reservoir to Source	River/Stream	505441	2.60	MILES	2016	5	Kentucky River	Knott	1.20	3.80	37.24973	-82.99834	37.28037	-82.99265	2020
KY-3265					Trace Fork 2.3 to 6.95	backwaters of pond above Campbellsville City Reservoir to headwaters	River/Stream	505442	4.65	MILES	2020	3	Green River	Taylor	2.30	6.95	37.36607	-85.33118	37.41755	-85.29623	2020
KY-1913	KY505441-1.25_01	Rename			Trace Fork UT 0.0 to 0.5	Trace Fork to Source	River/Stream	505441	0.50	MILES	2016	5	Kentucky River	Knott	0.00	0.50	37.24204	-83.00465	37.24172	-82.99800	2020
KY-1914	KY505460-46.7_01	Rename			Tradewater River 0.0 to 16.8	Mouth to Vaughn Ditch	River/Stream	505460	16.80	MILES	2020	4A	Tradewater River	Webster, Union, Crittenden	0.00	16.80	37.50547	-88.06399	37.47620	-87.93250	2020
KY-1919	KY505460_06	Rename			Tradewater River 111.15 to 116.65	Castleberry Creek to Sandlick Creek	River/Stream	505460	5.50	MILES	2014	2	Tradewater River	Christian	111.15	116.65	37.09423	-87.59793	37.06762	-87.58898	2020
KY-2793		Split	KY-1920	KY505460_07	Tradewater River 122.9 to 125.9	Brushy Fork to Dripping Spring Branch	River/Stream	505460	3.00	MILES	2020	5	Tradewater River	Christian	122.90	125.90	37.03972	-87.55116	37.03680	-87.52727	2020
KY-2792		Split	KY-1920	KY505460_07	Tradewater River 125.9 to 134.0	Dripping Spring Branch to Buntin Lake Dam	River/Stream	505460	8.10	MILES	2014	2	Tradewater River	Christian	125.90	134.00	37.03680	-87.52727	36.95621	-87.48714	2020
KY-3116		Split	KY-1915	KY505460_02	Tradewater River 20.55 to 41.3	Craborchard Creek to Providence Municipal Water Works	River/Stream	505460	20.75	MILES	2020	2	Tradewater River	Webster, Crittenden	20.55	41.30	37.42826	-87.83832	37.37828	-87.80140	2020
KY-3117		Split	KY-1915	KY505460_02	Tradewater River 41.3 to 42.3	Providence Municipal Water Works to 1 Mile Upstream	River/Stream	505460	1.00	MILES	2020	2	Tradewater River	Webster, Caldwell	41.30	42.30	37.37828	-87.80140	37.37041	-87.80511	2020
KY-3118		Split	KY-1915	KY505460_02	Tradewater River 42.3 to 46.35	1 Mile Upstream of Providence Municipal Water Works to Clear Creek	River/Stream	505460	4.05	MILES	2020	2	Tradewater River	Webster, Caldwell	42.30	46.35	37.37041	-87.80511	37.35079	-87.76774	2020
KY-1916	KY505460_03	Rename			Tradewater River 63.1 to 79.45	Donaldson Creek to Flynn Fork	River/Stream	505460	16.35	MILES	2004	5	Tradewater River	Caldwell, Hopkins	63.10	79.45	37.28690	-87.79559	37.18794	-87.76246	2020
KY-1917	KY505460_04	Rename			Tradewater River 96.7 to 98.5	Caney Creek to Buffalo Creek	River/Stream	505460	1.80	MILES	2008	2	Tradewater River	Hopkins	96.70	98.50	37.16243	-87.66394	37.15384	-87.64868	2020
KY-1918	KY505460_05	Rename			Tradewater River 98.5 to 111.15	Buffalo Creek to Castleberry Creek	River/Stream	505460	12.65	MILES	2008	5	Tradewater River	Hopkins, Christian	98.50	111.15	37.15384	-87.64868	37.09423	-87.59793	2020
KY-1922	KY505460-89.3-0.15_01	Rename			Tradewater River UT of UT 0.0 to 0.55	Mouth to Outfall	River/Stream	505460	0.55	MILES	2008	3	Tradewater River	Hopkins	0.00	0.55	37.17737	-87.70577	37.18159	-87.70063	2020
KY-1921	KY505463_01	Rename			Trammel Creek 0.0 to 24.0	Mouth to Little Trammel Creek	River/Stream	505463	24.00	MILES	2020	2B	Green River	Warren, Allen	0.00	24.00	36.87578	-86.37466	36.70239	-86.24790	2020
KY-1923	KY505463_02	Rename			Trammel Creek 24.0 to 30.55	Little Trammel Creek to KY/TN State Line	River/Stream	505463	6.55	MILES	2002	2	Green River	Allen	24.00	30.55	36.70239	-86.24717	36.63982	-86.19778	2020
KY-2588	KY516017_01	Rename			Trammel Fork 0.0 to 1.9	Mouth to Headwaters	River/Stream	516017	1.90	MILES	2002	2	Upper Cumberland River	McCreary	0.00	1.90	36.62326	-84.39087	36.60585	-84.37093	2020
KY-1924	KY505492_01	Rename			Tribune Creek 0.0 to 3.5	Mouth to UT (Enters from the North)	River/Stream	505492	3.50	MILES	2014	5	Tradewater River	Crittenden	0.00	3.50	37.31888	-87.98108	37.35199	-87.99932	2020
KY-2589	KY516023_01	Rename			Triplett Creek 0.0 to 5.9	Mouth to North Fork Triplett Creek	River/Stream	516023	5.90	MILES	2016	5	Licking River	Rowan	0.00	5.90	38.14577	-83.56749	38.15162	-83.51523	2020
KY-2591	KY516023_03	Rename			Triplett Creek 12.4 to 13.8	Morgan Fork to Morehead State University Water Plant	River/Stream	516023	1.40	MILES	2020	5	Licking River	Rowan	12.40	13.80	38.16654	-83.43720	38.18428	-83.42964	2020
KY-3031		Split	KY-2592	KY516023_04	Triplett Creek 13.8 to 14.8	Morehead State University Water Plant to 1 Mile Upstream	River/Stream	516023	1.00	MILES	2020	5	Licking River	Rowan	13.80	14.80	38.18428	-83.42964	38.19174	-83.41551	2020
KY-3030		Split	KY-2592	KY516023_04	Triplett Creek 14.8 to 21.85	1 Mile Upstream of Morehead State University Water Plant to Bearskin Branch	River/Stream	516023	7.05	MILES	2016	5	Licking River	Rowan	14.80	21.85	38.19174	-83.41551	38.24422	-83.32573	2020
KY-2593	KY516023_05	Rename			Triplett Creek 21.85 to 22.85	Bearskin Branch to Headwaters	River/Stream	516023	1.00	MILES	2016	5	Licking River	Rowan	21.85	22.85	38.24422	-83.32573	38.25010	-83.31010	2020
KY-2590	KY516023_02	Rename			Triplett Creek 5.9 to 12.4	North Fork Triplett Creek to Morgan Fork	River/Stream	516023	6.50	MILES	2016	5	Licking River	Rowan	5.90	12.40	38.15162	-83.51966	38.16654	-83.43720	2020
KY-1925	KY505515_01	Rename			Troublesome Creek 0.0 to 45.25	Mouth to Right and Left Forks Troublesome Creek Confluence	River/Stream	505515	45.25	MILES	2016	5	Kentucky River	Breathitt, Knott, Perry	0.00	45.25	37.48586	-83.34616	37.33503	-82.98083	2020
KY-1926	KY505516_01	Rename			Trough Camp Creek 1.5 to 6.35	Just above SR 1025 to Headwaters	River/Stream	505516	4.85	MILES	2004	5	Tygarts Creek	Carter	1.50	6.35	38.32204	-83.15952	38.33622	-83.23167	2020
KY-1927	KY505525_01	Rename			Truman Creek 2.0 to 3.2	1.2 miles below Carlisle Co Regional STP to the STP	River/Stream	505525	1.20	MILES	2016	2	Mississippi River	Carlisle	2.00	3.20	36.89587	-89.01722	36.87992	-89.01222	2020
KY-1928	KY505525_02	Rename			Truman Creek 3.2 to 4.1	Central Creek to UT	River/Stream	505525	0.90	MILES	2006	5	Mississippi River	Carlisle	3.20	4.10	36.87992	-89.01222	36.86894	-89.02444	2020
KY-12	KY1548311_01	Rename			Tug Fork 0.0 to 10.45	Mouth to Headwaters	River/Stream	1548311	10.45	MILES	2016	5	Big Sandy River	Lawrence	0.00	10.45	38.11807	-82.60150	38.00199	-82.51920	2020
KY-3119		Split	KY-13	KY1548311_02	Tug Fork 10.45 to 23.8	Rockcastle Creek to Martin County Water District #1	River/Stream	1548311	13.35	MILES	2020	2	Big Sandy River	Lawrence, Martin	10.45	23.80	38.00199	-82.51920	37.91628	-82.48585	2020
KY-3120		Split	KY-13	KY1548311_02	Tug Fork 23.8 to 24.8	Martin County Water District #1 to 1 Mile Upstream	River/Stream	1548311	1.00	MILES	2020	2	Big Sandy River	Martin	23.80	24.80	37.91651	-82.48579	37.90696	-82.47408	2020
KY-3121		Split	KY-13	KY1548311_02	Tug Fork 24.8 to 25.55	1 Mile Upstream of Martin County Water District #1 to Big Elk Creek	River/Stream	1548311	0.75	MILES	2020	2	Big Sandy River	Martin	24.80	25.55	37.90696	-82.47408	37.89945	-82.47094	2020
KY-3122		Split	KY-13	KY1548311_02	Tug Fork 25.55 to 28.2	Big Elk Creek to Chaffin Branch	River/Stream	1548311	2.65	MILES	2020	2	Big Sandy River	Martin	25.55	28.20	37.89945	-82.47094	37.90368	-82.44691	2020
KY-3123		Split	KY-13	KY1548311_02	Tug Fork 28.2 to 41.95	Chaffin Branch to Pidgeon Creek	River/Stream	1548311	13.75	MILES	2020	2	Big Sandy River	Martin	28.20	41.95	37.90368	-82.44691	37.78997	-82.35137	2020
KY-14	KY1548311_03	Rename			Tug Fork 72.35 to 78.2	Confluence with Blackberry Creek to Confluence With Peter Creek	River/Stream	1548311	5.85	MILES	2020	5	Big Sandy River	Pike	72.35	78.20	37.60818	-82.16339	37.56675	-82.14460	2020
KY-15	KY1548311_04	Rename			Tug Fork 78.2 to 84.8	Peter Creek to Beech Creek (WV)	River/Stream	1548311	6.60	MILES	2016	2	Big Sandy River	Pike	78.20	84.80	37.56675	-82.14460	37.54613	-82.06598	2020
KY-2810					Tug Fork 84.8 to 95.1	Beech Creek (West Virginia) to Virginia/West Virginia State Line	River/Stream	1548311	10.30	MILES	2020	3	Big Sandy River	Pike	84.80	95.10	37.54613	-82.06598	37.53822	-81.96754	2020
KY-1929	KY505560_01	Rename			Tules Creek 5.2 to 13.55	Rough River Reservoir to Headwaters	River/Stream	505560	8.35	MILES	2004	2	Green River	Breckinridge	5.20	13.55	37.68378	-86.42834	37.75125	-86.41472	2020
KY-3235					Tull Creek 2.05 to 4.4	State Line to Headwaters	River/Stream	505561	2.35	MILES	2020	4C	Mississippi River	Fulton	2.05	4.40	36.50566	-89.21505	36.53448	-89.21916	2020
KY-1930	KY505568_01	Rename			Tunnel Branch 0.0 to 1.8	Mouth to Land Use Change (forested)	River/Stream	505568	1.80	MILES	2004	5	Little Sandy River	Greenup	0.00	1.80	38.41250	-82.90080	38.40213	-82.87667	2020
KY-1932	KY505593_01	Rename			Turkey Creek 0.0 to 1.2	Mouth to Honeycut Branch	River/Stream	505593	1.20	MILES	2002	2	Upper Cumberland River	Knox	0.00	1.20	36.85626	-83.79860	36.87018	-83.79030	2020
KY-1933	KY505595_01	Rename			Turkey Creek 0.0 to 3.7	Mouth to Headwaters	River/Stream	505595	3.70	MILES	2012	5	Tennessee River	Graves	0.00	3.70	36.85894	-88.58161	36.89341	-88.61185	2020
KY-1934	KY505598_01	Rename			Turkey Creek 0.0 to 6.1	Mouth to Headwaters	River/Stream	505598	6.10	MILES	2010	5	Big Sandy River	Floyd	0.00	6.10	37.53175	-82.78910	37.45611	-82.78411	2020
KY-1931	KY505586_01	Rename			Turkey Creek 1.25 to 3.4	North Fork of Turkey Creek to Headwaters	River/Stream	505586	2.15	MILES	2002	2	Tennessee River	Trigg	1.25	3.40	36.74562	-88.07788	36.73713	-88.04556	2020
KY-1935	KY505664_00	Rename			Turner Lake	Natural Lake Boundary	Lake/Reservoir	505664	60	ACRES	2020	2	Ohio River	Ballard			37.18278	-89.03060	37.16322	-89.05008	2020
KY-1937	KY505697_02	Rename			Twelvemile Creek 10.15 to 13.05	Flag Spring Creek to UT	River/Stream	505697	2.90	MILES	2006	2	Ohio River	Campbell	10.15	13.05	38.89423	-84.27835	38.88833	-84.30902	2020
KY-1936	KY505697_01	Rename			Twelvemile Creek 3.5 to 10.15	Brush Creek to Flagg Spring Creek	River/Stream	505697	6.65	MILES	2000	2	Ohio River	Campbell	3.50	10.15	38.94680	-84.34714	38.89423	-84.27835	2020
KY-1938	KY505730_01	Rename			Twomile Creek 0.0 to 2.2	Mouth to Headwaters	River/Stream	505730	2.20	MILES	2016	5	Big Sandy River	Johnson	0.00	2.20	37.83520	-82.72114	37.81031	-82.73928	2020
KY-1939	KY505732_01	Rename			Twomile Creek 0.0 to 4.75	Mouth to UT (2nd Order)	River/Stream	505732	4.75	MILES	2002	5	Green River	Daviess	0.00	4.75	37.65638	-87.07076	37.59230	-87.06577	2020
KY-1940	KY505734-3.15_01	Rename			Twomile Creek UT 1.95 to 3.25	Reduced Forested Corridor to Headwaters	River/Stream	505734	1.30	MILES	2016	5	Kentucky River	Owen	1.95	3.25	38.62854	-84.86690	38.61542	-84.85284	2020
KY-2594	KY516088_01	Rename			Tygarts Creek 0.0 to 24.8	Mouth to Brushy Creek	River/Stream	516088	24.80	MILES	2008	5	Tygarts Creek	Greenup	0.00	24.80	38.73348	-82.95685	38.59974	-82.95273	2020
KY-2595	KY516088_02	Rename			Tygarts Creek 24.8 to 36.0	Brushy Creek to just downstream of Lost Creek	River/Stream	516088	11.20	MILES	2016	5	Tygarts Creek	Greenup	24.80	36.00	38.59974	-82.95273	38.51644	-82.97476	2020
KY-2596	KY516088_03	Rename			Tygarts Creek 36.0 to 45.45	Just downstream of Lost Creek to Leatherwood Branch	River/Stream	516088	9.45	MILES	2016	5	Tygarts Creek	Greenup	36.00	45.45	38.51644	-82.97476	38.48599	-83.02795	2020
KY-2597	KY516088_04	Rename			Tygarts Creek 58.25 to 65.0	UT to Rock Lick	River/Stream	516088	6.75	MILES	2016	2	Tygarts Creek	Carter	58.25	65.00	38.40767	-83.03946	38.36503	-83.08644	2020
KY-2598	KY516088_05	Rename			Tygarts Creek 65.0 to 68.5	Rock Lick to Smoky Creek	River/Stream	516088	3.50	MILES	2016	2	Tygarts Creek	Carter	65.00	68.50	38.36503	-83.08644	38.36533	-83.11456	2020
KY-2599	KY516088_06	Rename			Tygarts Creek 68.5 to 76.8	Smoky Creek to Extent of Quarry	River/Stream	516088	8.30	MILES	2016	5	Tygarts Creek	Carter	68.50	76.80	38.36533	-83.11456	38.31551	-83.14382	2020
KY-3124		Split	KY-2600	KY516088_07	Tygarts Creek 81.5 to 82.5	Withdrawal Point to 1 mile upstream	River/Stream	516088	1.00	MILES	2020	5	Tygarts Creek	Carter	81.50	82.50	38.29037	-83.19062	38.28293	-83.19483	2020
KY-3125		Split	KY-2600	KY516088_07	Tygarts Creek 82.5 to 83.2	1 mile upstream to Jacobs Fork	River/Stream	516088	0.70	MILES	2020	5	Tygarts Creek	Carter	82.50	83.20	38.28293	-83.19483	38.27468	-83.19885	2020
KY-2601	KY516088_08	Rename			Tygarts Creek 83.2 to 88.6	Jacobs Fork to confluence of Flat Fork and Upper Tygarts Branch	River/Stream	516088	5.40	MILES	2010	5	Tygarts Creek	Carter	83.20	88.60	38.27468	-83.19886	38.29785	-83.27698	2020
KY-2602	KY516088-74.3_01	Rename			Tygarts Creek UT 0.0 to 0.8	Mouth to Discharge	River/Stream	516088	0.80	MILES	2010	3	Tygarts Creek	Carter	0.00	0.80	38.32502	-83.12588	38.31890	-83.11966	2020
KY-1941	KY505754_01	Rename			Tyson Branch 0.0 to 2.5	Mouth to Wooded Buffer	River/Stream	505754	2.50	MILES	2004	5	Tradewater River	Caldwell	0.00	2.50	37.33340	-87.83894	37.32473	-87.87926	2020
KY-1942	KY505758-2.1_01	Rename			Uhlens Run UT 1.0 to 1.5	Change in Land Use From Pasture to Forest to Headwaters	River/Stream	505758	0.50	MILES	2016	5	Ohio River	Greenup	1.00	1.50	38.52338	-82.78393	38.52333	-82.77490	2020
KY-1943	KY505861_01	Rename			Upper Branch North Fork Little River 0.0 to 2.8	Mouth to Lake Morris Dam	River/Stream	505861	2.80	MILES	2002	5	Lower Cumberland River	Christian	0.00	2.80	36.88765	-87.45611	36.91997	-87.45599	2020
KY-1944	KY505864_01	Rename			Upper Brush Creek 0.0 to 3.15	Mouth to Headwaters	River/Stream	505864	3.15	MILES	2004	2	Green River	Green, Taylor	0.00	3.15	37.43115	-85.58481	37.46849	-85.58806	2020
KY-2603	KY516120_01	Rename			Upper Devil Creek 0.0 to 1.0	Mouth to near Right Fork	River/Stream	516120	1.00	MILES	2000	5	Kentucky River	Wolfe	0.00	1.00	37.65560	-83.57710	37.66310	-83.56677	2020
KY-2604	KY516129_01	Rename			Upper Hood Branch 0.0 to 1.6	Mouth to Headwaters	River/Stream	516129	1.60	MILES	2000	2	Kentucky River	Powell	0.00	1.60	37.78222	-83.69025	37.76353	-83.69841	2020
KY-118	KY485707_01	Rename			Upper Howard Creek 0.0 to 3.25	Mouth to Confluence with Dry Fork	River/Stream	485707	3.25	MILES	2000	5	Kentucky River	Clark	0.00	3.25	37.86485	-84.12551	37.89819	-84.12225	2020
KY-119	KY485707-13.0_01	Rename			Upper Howard Creek UT 2.1 to 2.7	Crowe Ridge Road to Fox Quisenberry Road	River/Stream	485707	0.60	MILES	2006	2	Kentucky River	Clark	2.10	2.70	37.94443	-84.05310	37.95015	-84.06125	2020
KY-2605	KY516133_01	Rename			Upper Jacks Creek 0.0 to 2.2	Mouth to Forested Reach	River/Stream	516133	2.20	MILES	2016	5	Kentucky River	Leslie	0.00	2.20	37.02590	-83.52818	37.01296	-83.49735	2020
KY-1945	KY505895_01	Rename			Upper Pigeon Branch 0.0 to 1.9	Mouth to Headwaters	River/Stream	505895	1.90	MILES	2004	5	Big Sandy River	Pike	0.00	1.90	37.23784	-82.51633	37.26003	-82.52843	2020
KY-43	KY2557479-B_00	Rename			Upper Silver Creek Lake (aka Berea Reservoir)	Dam to Lake Boundary	Lake/Reservoir	511992.2	5	ACRES	2016	2	Kentucky River	Madison			37.53410	-84.24421	37.53193	-84.24397	2020
KY-1	KY0065_00	Rename			Upper Sportsmans Lake (aka Game Farm Upper Pond)	Entire Reservoir	Lake/Reservoir	538	6	ACRES	2008	2	Kentucky River	Franklin			38.17377	-84.92362	38.17601	-84.92362	2020
KY-1946	KY505917_01	Rename			Upper Twin Creek 0.0 to 3.5	Mouth to Keen Fork	River/Stream	505917	3.50	MILES	2000	5	Kentucky River	Breathitt	0.00	3.50	37.54595	-83.56305	37.55261	-83.51388	2020
KY-1947	KY505940_01	Rename			Valley Creek 0.0 to 3.55	Mouth to East Rhodes Creek	River/Stream	505940	3.55	MILES	2008	5	Green River	Hardin	0.00	3.55	37.59758	-85.95398	37.62573	-85.92246	2020
KY-1950	KY505940_04	Rename			Valley Creek 10.8 to 12.6	Freeman Creek to UT	River/Stream	505940	1.80	MILES	2004	4A	Green River	Hardin	10.80	12.60	37.68734	-85.87251	37.68746	-85.84997	2020
KY-1948	KY505940_02	Rename			Valley Creek 3.55 to 8.4	East Rhodes Creek to Billy Creek	River/Stream	505940	4.85	MILES	2014	2	Green River	Hardin	3.55	8.40	37.62573	-85.92246	37.67459	-85.89277	2020
KY-1949	KY505940_03	Rename			Valley Creek 8.4 to 10.8	Billy Creek to Freeman Creek	River/Stream	505940	2.40	MILES	2004	5	Green River	Hardin	8.40	10.80	37.67459	-85.89277	37.68734	-85.87251	2020
KY-1951	KY505996_01	Rename			Vaughn Ditch 0.0 to 3.25	Mouth to Craborchard Creek	River/Stream	505996	3.25	MILES	2020	2C	Tradewater River	Webster	0.00	3.25	37.47620	-87.93250	37.46166	-87.88251	2020
KY-1952	KY506001_01	Rename			Vaughns Branch 0.0 to 2.2	Mouth to Headwaters (UT Created)	River/Stream	506001	2.20	MILES	2016	5	Kentucky River	Fayette	0.00	2.20	38.05513	-84.55016	38.03662	-84.52100	2020
KY-1953	KY506001-1.7_01	Rename			Vaughns Branch UT 0.0 to 1.85	Mouth to Headwaters	River/Stream	506001	1.85	MILES	2016	5	Kentucky River	Fayette	0.00	1.85	38.03861	-84.52808	38.01819	-84.50889	2020
KY-1954	KY506017_01	Rename			Venters Branch 0.4 to 1.85	Jones Branch to Hollow Fill	River/Stream	506017	1.45	MILES	2010	5	Big Sandy River	Martin	0.40	1.85	37.80798	-82.56197	37.79570	-82.54836	2020
KY-1955	KY506062_01	Rename			Viny Fork 0.0 to 4.2	Mouth to headwaters	River/Stream	506062	4.20	MILES	2014	5	Kentucky River	Madison	0.00	4.20	37.70998	-84.18205	37.66969	-84.17090	2020
KY-1956	KY506075-5.6_01	Rename			Vulton Creek UT 0.0 to 2.7	Mouth to Headwaters	River/Stream	506075	2.70	MILES	2012	5	Mississippi River	Graves	0.00	2.70	36.70465	-88.53543	36.67473	-88.51960	2020
KY-1957	KY506092_01	Rename			Wades Creek 0.0 to 4.0	Mouth to Muck Branch	River/Stream	506092	4.00	MILES	2002	2	Tennessee River	Marshall, Calloway	0.00	4.00	36.76824	-88.27799	36.74106	-88.32965	2020
KY-2606	KY516208_01	Rename			Walker Creek 0.0 to 5.5	Mouth to Confluence with Hell for Certain Creek	River/Stream	516208	5.50	MILES	2000	2	Kentucky River	Lee	0.00	5.50	37.60678	-83.64652	37.67306	-83.65431	2020
KY-2681	KY90001855_00	Rename			Wallace Branch Spring	Entire Springshed of Wallace Branch Spring	Spring	90001855	6617	ACRES	2020	5	Lower Cumberland River	Caldwell			37.07063	-87.92956	37.12980	-87.91677	2020
KY-1958	KY506143_01	Rename			Wallace Fork 0.0 to 3.0	Mouth to UT	River/Stream	506143	3.00	MILES	2012	5	Lower Cumberland River	Christian	0.00	3.00	36.98903	-87.70030	37.01822	-87.70989	2020
KY-1959	KY506154_01	Rename			Wallins Creek 0.0 to 4.25	Mouth to Trace Fork Headwaters	River/Stream	506154	4.25	MILES	2008	5	Upper Cumberland River	Harlan	0.00	4.25	36.82653	-83.41699	36.77640	-83.39340	2020
KY-1960	KY506199_01	Rename			Walters Creek 0.0 to 2.5	Mouth to Dye Branch	River/Stream	506199	2.50	MILES	2004	2	Green River	Larue	0.00	2.50	37.51286	-85.74717	37.48685	-85.74678	2020
KY-1961	KY506209_01	Rename			War Creek 0.0 to 3.0	Mouth to UT	River/Stream	506209	3.00	MILES	2000	2	Kentucky River	Breathitt	0.00	3.00	37.61081	-83.48928	37.57956	-83.47351	2020
KY-3248		Split	KY-2894		War Fork 0.0 to 1.9	Mouth to 0.3 River Miles Downstream of Tarpin Lick Branch	River/Stream	516224	1.90	MILES	2020	2	Kentucky River	Jackson	0.00	1.90	37.53286	-83.90930	37.51193	-83.91470	2020
KY-3247		Split	KY-2894		War Fork 1.9 to 8.85	0.3 River Miles Downstream of Tarpin Lick Branch to Steer Fork	River/Stream	516224	6.95	MILES	2020	2	Kentucky River	Jackson	1.90	8.85	37.51193	-83.91470	37.45467	-83.92699	2020
KY-2895		Split	KY-2607	KY516224_01	War Fork 8.85 to 14.15	Steer Fork to Headwaters	River/Stream	516224	5.30	MILES	2016	2	Kentucky River	Jackson	8.85	14.15	37.45467	-83.92699	37.39521	-83.91001	2020
KY-1962	KY506219_01	Rename			Ward Creek 5.1 to 10.3	US 62 to Headwaters	River/Stream	506219	5.20	MILES	2010	5	Tradewater River	Caldwell	5.10	10.30	37.13020	-87.80223	37.07503	-87.80005	2020
KY-2608	KY516229_01	Rename			Wardens Slough 1.2 to 3.3	Mouth to Goose Pond Creek	River/Stream	516229	2.10	MILES	2004	5	Ohio River	Union	1.20	3.30	37.59285	-88.12656	37.62274	-88.13138	2020
KY-1963	KY506239_01	Rename			Warrens Fork 0.0 to 3.5	Mouth to loss of riparian buffer	River/Stream	506239	3.50	MILES	2012	5	Lower Cumberland River	Christian	0.00	3.50	36.85977	-87.34970	36.87717	-87.30554	2020
KY-2609	KY516241_01	Rename			Watches Fork 0.0 to 1.0	Mouth to Headwaters	River/Stream	516241	1.00	MILES	2020	2	Kentucky River	Owsley	0.00	1.00	37.34455	-83.56205	37.34017	-83.54705	2020
KY-3	KY0068_00	Rename			Waterson Park Lake	Entire Reservoir	Lake/Reservoir	298	4	ACRES	2010	2	Ohio River	Jefferson			38.18718	-85.79798	38.18772	-85.79663	2020
KY-2610	KY516249_01	Rename			Watts Branch 0.0 to 2.7	Mouth to Headwaters	River/Stream	516249	2.70	MILES	2002	2	Upper Cumberland River	McCreary	0.00	2.70	36.65770	-84.65623	36.62546	-84.66825	2020
KY-2611	KY516250_01	Rename			Watts Creek 0.0 to 1.4	Mouth to Blake Fork	River/Stream	516250	1.40	MILES	2002	2	Upper Cumberland River	Whitley	0.00	1.40	36.76206	-84.16470	36.77166	-84.14848	2020
KY-2612	KY516251_01	Rename			Watts Creek 2.4 to 4.4	Camp Blanton Lake to Headwaters	River/Stream	516251	2.00	MILES	2002	2	Upper Cumberland River	Harlan	2.40	4.40	36.86037	-83.37980	36.87916	-83.36841	2020
KY-1964	KY506359_01	Rename			Weirs Creek 0.0 to 4.8	Mouth to Nebo Dixon Road	River/Stream	506359	4.80	MILES	2004	5	Tradewater River	Hopkins	0.00	4.80	37.34528	-87.74167	37.39141	-87.69414	2020
KY-1965	KY506359-6.4_01	Rename			Weirs Creek UT 2.1 to 4.5	UT of UT to Headwaters	River/Stream	506359	2.40	MILES	2014	5	Tradewater River	Webster	2.10	4.50	37.41321	-87.70021	37.40941	-87.72982	2020
KY-1966	KY506362_01	Rename			Welch Creek 0.0 to 14.6	Mouth to UT	River/Stream	506362	14.60	MILES	2014	2	Green River	Butler	0.00	14.60	37.22533	-86.66858	37.29008	-86.57573	2020
KY-1967	KY506362_02	Rename			Welch Creek 14.6 to 18.95	UT to Woosley Creek	River/Stream	506362	4.35	MILES	2014	5	Green River	Butler	14.60	18.95	37.29008	-86.57573	37.32400	-86.54509	2020
KY-1968	KY506362-11.3_01	Rename			Welch Creek UT 0.0 to 0.9	Mouth to Headwaters	River/Stream	506362	0.90	MILES	2008	3	Green River	Butler	0.00	0.90	37.26200	-86.59546	37.27025	-86.60698	2020
KY-2613	KY516260_01	Rename			Welch Fork 0.0 to 1.05	Mouth to UT	River/Stream	516260	1.05	MILES	2006	2	Licking River	Menifee	0.00	1.05	37.94404	-83.50360	37.93209	-83.51364	2020
KY-1969	KY506380_01	Rename			Wells Creek 0.0 to 3.5	Mouth to Pruetts Fork	River/Stream	506380	3.50	MILES	2004	5	Little Sandy River	Elliott	0.00	3.50	38.06619	-83.15332	38.03115	-83.17666	2020
KY-1970	KY506405_01	Rename			West Bays Fork 0.0 to 2.3	Mouth to Near Mouth of Big Branch	River/Stream	506405	2.30	MILES	2014	2	Green River	Allen	0.00	2.30	36.81211	-86.24042	36.78771	-86.22935	2020
KY-1971	KY506405-1.6_01	Rename			West Bays Fork UT 0.0 to 1.0	Mouth to Headwaters	River/Stream	506405	1.00	MILES	2008	5	Green River	Allen	0.00	1.00	36.79254	-86.23656	36.78233	-86.24804	2020
KY-1972	KY506413_01	Rename			West Creek 0.0 to 9.8	Mouth to Headwaters	River/Stream	506413	9.80	MILES	2012	2	Licking River	Harrison, Robertson	0.00	9.80	38.53626	-84.20070	38.53323	-84.06289	2020
KY-1973	KY506423_01	Rename			West Fork Buck Creek 0.0 to 3.3	Mouth to Confluence with UT at KY-2437 Bridge	River/Stream	506423	3.30	MILES	2014	4A	Green River	McLean	0.00	3.30	37.52005	-87.17551	37.55233	-87.13476	2020
KY-1974	KY506424_01	Rename			West Fork Canoe Creek 0.0 to 7.75	Mouth to Pond	River/Stream	506424	7.75	MILES	2014	5	Ohio River	Henderson	0.00	7.75	37.76035	-87.58462	37.66687	-87.60862	2020
KY-1975	KY506424-3.4_01	Rename			West Fork Canoe Creek UT 0.0 to 2.2	Mouth to UT to UT to West Fork Canoe Creek	River/Stream	506424	2.20	MILES	2014	5	Ohio River	Henderson	0.00	2.20	37.71296	-87.60086	37.68450	-87.59236	2020
KY-1976	KY506426_01	Rename			West Fork Clarks River 0.0 to 10.4	Mouth to Relict Channel of West Fork of Clarks River	River/Stream	506426	10.40	MILES	2020	5	Tennessee River	McCracken, Graves	0.00	10.40	36.96969	-88.52960	36.90974	-88.55550	2020
KY-1977	KY506426_02	Rename			West Fork Clarks River 10.4 to 13.1	Relict West Fork Clarks River Channel to Spring Creek	River/Stream	506426	2.70	MILES	2012	4A	Tennessee River	Graves	10.40	13.10	36.90974	-88.55550	36.87130	-88.55002	2020
KY-1978	KY506426_03	Rename			West Fork Clarks River 13.1 to 17.25	Spring Creek to Panther Creek	River/Stream	506426	4.15	MILES	2012	4A	Tennessee River	Graves	13.10	17.25	36.87130	-88.55002	36.82217	-88.51448	2020
KY-1979	KY506426_04	Rename			West Fork Clarks River 17.25 to 20.15	Panther Creek to Soldier Creek	River/Stream	506426	2.90	MILES	2006	2	Tennessee River	Graves, Marshall	17.25	20.15	36.82217	-88.51448	36.79642	-88.47535	2020
KY-2797		Split	KY-1980	KY506426_05	West Fork Clarks River 20.15 to 23.25	Soldier Creek to Duncan Creek	River/Stream	506426	3.10	MILES	2012	5	Tennessee River	Calloway, Marshall	20.15	23.25	36.79642	-88.47535	36.76359	-88.45642	2020
KY-2796		Split	KY-1980	KY506426_05	West Fork Clarks River 23.25 to 28.4	Duncan Creek to Guier Branch	River/Stream	506426	5.15	MILES	2020	5	Tennessee River	Calloway, Marshall	23.25	28.40	36.76359	-88.45642	36.70510	-88.46211	2020
KY-1981	KY506426_06	Rename			West Fork Clarks River 28.4 to 31.3	Guier Creek to Clear Creek	River/Stream	506426	2.90	MILES	2012	4A	Tennessee River	Calloway	28.40	31.30	36.70510	-88.46211	36.67425	-88.44960	2020
KY-1982	KY506426_07	Rename			West Fork Clarks River 31.3 to 34.1	Clear Creek to Darnell Creek	River/Stream	506426	2.80	MILES	2012	4A	Tennessee River	Calloway	31.30	34.10	36.67425	-88.44960	36.64000	-88.43255	2020
KY-1983	KY506426_08	Rename			West Fork Clarks River 34.2 to 38.4	Darnell Creek to Headwaters	River/Stream	506426	4.20	MILES	2008	2	Tennessee River	Calloway	34.20	38.40	36.64000	-88.43255	36.62765	-88.37280	2020
KY-1984	KY506426-10.4_01	Rename			West Fork Clarks River UT 0.0 to 11.1	Mouth to Hominy Branch	River/Stream	506426	11.10	MILES	2012	5	Tennessee River	Graves	0.00	11.10	36.90005	-88.54781	36.82854	-88.51272	2020
KY-3237					West Fork Clarks River UT 0.0 to 2.4	Mouth to Headwaters	River/Stream	506426	2.40	MILES	2020	5	Tennessee River	Graves	0.00	2.40	36.84995	-88.54063	36.82558	-88.56055	2020
KY-1985	KY506428_01	Rename			West Fork Cox Creek 0.0 to 7.1	Mouth to Headwaters	River/Stream	506428	7.10	MILES	2020	4A	Salt River	Nelson, Bullitt	0.00	7.10	37.96545	-85.53251	37.90402	-85.58597	2020
KY-1986	KY506431_01	Rename			West Fork Drakes Creek 0.0 to 23.25	Mouth to Dam	River/Stream	506431	23.25	MILES	2020	5	Green River	Warren, Simpson	0.00	23.25	36.83879	-86.41288	36.72381	-86.55179	2020
KY-1987	KY506431_02	Rename			West Fork Drakes Creek 26.65 to 32.1	Sharps Branch to Thompson Branch	River/Stream	506431	5.45	MILES	2008	5	Green River	Simpson	26.65	32.10	36.69226	-86.54576	36.66123	-86.50066	2020
KY-2696	KYCLN221_00	Rename			West Fork Drakes Reservoir	Entire Reservoir	Lake/Reservoir	314	110	ACRES	2008	2	Green River	Simpson			36.72353	-86.55210	36.70549	-86.54236	2020
KY-1988	KY506436-1.4_01	Rename			West Fork Lewis Creek UT 0.0 to 2.2	Mouth to Headwaters	River/Stream	506436	2.20	MILES	2004	5	Green River	Ohio	0.00	2.20	37.36810	-86.99626	37.39194	-87.01975	2020
KY-1989	KY506437_01	Rename			West Fork Lower Howard Creek 0.0 to 3.85	Mouth to Headwaters	River/Stream	506437	3.85	MILES	2016	4A	Kentucky River	Clark	0.00	3.85	37.93369	-84.26952	37.98037	-84.26908	2020
KY-1990	KY506438_01	Rename			West Fork Massac Creek 0.0 to 0.3	Mouth to Wilmington Chiles STP	River/Stream	506438	0.30	MILES	1998	3	Ohio River	McCracken	0.00	0.30	37.09327	-88.73202	37.09312	-88.73701	2020
KY-1991	KY506438_02	Rename			West Fork Massac Creek 1.0 to 6.2	Gravel Pits to Little Massac Creek	River/Stream	506438	5.20	MILES	2006	2	Ohio River	McCracken	1.00	6.20	37.09369	-88.74598	37.06021	-88.79830	2020
KY-1993	KY506438-3.9_01	Rename			West Fork Massac Creek UT 0.0 to 0.8	Mouth to Discharge	River/Stream	506438	0.80	MILES	2008	3	Ohio River	McCracken	0.00	0.80	37.08043	-88.78100	37.08198	-88.79500	2020
KY-1992	KY506438-1.8_01	Rename			West Fork Massac Creek UT 0.0 to 1.9	Mouth to Point of Discharge	River/Stream	506438	1.90	MILES	2012	3	Ohio River	McCracken	0.00	1.90	37.08924	-88.75495	37.07184	-88.76463	2020
KY-1994	KY506438-3.9-0.1_01	Rename			West Fork Massac Creek UT of UT 0.0 to 0.7	Mouth to Discharge	River/Stream	506438	0.70	MILES	2008	3	Ohio River	McCracken	0.00	0.70	37.08035	-88.78282	37.07798	-88.79031	2020
KY-1995	KY506439_01	Rename			West Fork Mayfield Creek 5.35 to 14.8	Horn Creek to Extensively Channelized Section (0.9 mile below SR 339 Bridge)	River/Stream	506439	9.45	MILES	2020	4C	Mississippi River	Graves, Carlisle	5.35	14.80	36.86679	-88.92482	36.81336	-88.80190	2020
KY-1996	KY506439-7.45_01	Rename			West Fork Mayfield Creek UT 0.0 to 3.0	Mouth to Headwaters	River/Stream	506439	3.00	MILES	2012	5	Mississippi River	Carlisle	0.00	3.00	36.84571	-88.91011	36.80818	-88.91581	2020
KY-1997	KY506440_01	Rename			West Fork Mill Creek 0.0 to 1.0	Mouth to Pryor Branch	River/Stream	506440	1.00	MILES	2000	5	Kentucky River	Carroll	0.00	1.00	38.60443	-85.16790	38.59419	-85.17573	2020
KY-1998	KY506441_01	Rename			West Fork Otter Creek 0.0 to 2.75	Mouth to Hicks Branch	River/Stream	506441	2.75	MILES	2000	2	Kentucky River	Madison	0.00	2.75	37.83215	-84.27385	37.79694	-84.28015	2020
KY-1999	KY506442_01	Rename			West Fork Otter Creek 0.0 to 3.15	Mouth to UT near KY 210	River/Stream	506442	3.15	MILES	2006	2	Salt River	Larue	0.00	3.15	37.50770	-85.58158	37.48644	-85.61167	2020
KY-2719					West Fork Otter Creek 3.15 to 5.45	UT near KY 210 to Headwaters	River/Stream	506442	2.30	MILES	2020	3	Salt River	Larue	3.15	5.45	37.48644	-85.61167	37.48857	-85.63388	2020
KY-2000	KY506444_01	Rename			West Fork Pond River 1.8 to 6.3	Tributary approx. 0.5 river miles downstream KY-813 to McFarland Creek	River/Stream	506444	4.50	MILES	2020	5	Green River	Christian, Hopkins	1.80	6.30	37.15936	-87.35151	37.13366	-87.37453	2020
KY-2844		Split	KY-2001	KY506444_02	West Fork Pond River 12.6 to 20.55	Unnamed Tributary (0.8 River Miles Downstream of CR-1078 J P Grace Road) to UT downstream of KY-1914	River/Stream	506444	7.95	MILES	2002	2	Green River	Christian	12.60	20.55	37.09098	-87.36698	37.05502	-87.40948	2020
KY-2868		Split	KY-2002	KY506444_03	West Fork Pond River 20.55 to 22.7	UT downstream of KY-1914 to East Branch Pond River	River/Stream	506444	2.15	MILES	2008	5	Green River	Christian	20.55	22.70	37.05502	-87.40948	37.03070	-87.40602	2020
KY-2867		Split	KY-2002	KY506444_03	West Fork Pond River 22.7 to 26.2	East Branch Pond River to dam	River/Stream	506444	3.50	MILES	2020	5	Green River	Christian	22.70	26.20	37.03070	-87.40602	37.00878	-87.43532	2020
KY-2843		Split	KY-2001	KY506444_02	West Fork Pond River 6.3 to 12.6	McFarland Creek to Unnamed Tributary (0.8 River Miles Downstream of CR-1078 J P Grace Road)	River/Stream	506444	6.30	MILES	2020	2	Green River	Christian	6.30	12.60	37.13366	-87.37453	37.09098	-87.36698	2020
KY-4	KY1269347_01	Rename			West Fork Red River 14.65 to 26.8	KY/TN State Line to Montgomery Creek	River/Stream	1269347	12.15	MILES	2020	5	Lower Cumberland River	Christian	14.65	26.80	36.64154	-87.35589	36.70964	-87.32988	2020
KY-2889					West Fork Red River 26.8 to 32.1	Montgomery Creek to 0.5 River Miles Downstream of US-41 Dixie Beeline Highway	River/Stream	1269347	5.30	MILES	2020	3	Lower Cumberland River	Christian, Todd	26.80	32.10	36.70964	-87.32988	36.74547	-87.30999	2020
KY-2699	KYWFC-001_01	Rename			West Fork Red River UT 0.0 to 0.05	Sink to outfall	River/Stream	1269347	0.05	MILES	2002	3	Lower Cumberland River	Todd	0.00	0.05	36.72269	-87.30360	36.72317	-87.30262	2020
KY-5	KY1269347-40.75_01	Rename			West Fork Red River UT 0.0 to 6.0	Mouth to Headwaters	River/Stream	1269347	6.00	MILES	2012	5	Lower Cumberland River	Todd	0.00	6.00	36.80511	-87.26915	36.84521	-87.21919	2020
KY-2003	KY506451_01	Rename			West Fork Sugar Creek 0.0 to 2.6	Mouth to UT	River/Stream	506451	2.60	MILES	2006	2	Kentucky River	Garrard	0.00	2.60	37.69151	-84.57461	37.69158	-84.61263	2020
KY-2004	KY506457_01	Rename			West Hickman Creek 0.0 to 3.1	Mouth to West Hickman POTW	River/Stream	506457	3.10	MILES	2020	5	Kentucky River	Jessamine	0.00	3.10	37.90591	-84.49950	37.94195	-84.50205	2020
KY-2005	KY506457_02	Rename			West Hickman Creek 3.1 to 8.5	Lexington West Hickman STP to Lexington Reservoir #3 (Lake Hickman)	River/Stream	506457	5.40	MILES	2020	5	Kentucky River	Jessamine, Fayette	3.10	8.50	37.94195	-84.50205	37.99982	-84.47080	2020
KY-1731	KY503711_01	Rename			Wet Woods Creek (Slop Ditch) 2.2 to 4.25	Point up to reconstructed channel to headwaters	River/Stream	503711	2.05	MILES	2014	5	Salt River	Jefferson	2.20	4.25	38.14413	-85.71214	38.14108	-85.68041	2020
KY-2006	KY506514_01	Rename			Whayne Branch 0.9 to 8.4	Obion Creek backwaters (Dry Lake) to Headwaters	River/Stream	506514	7.50	MILES	2012	5	Mississippi River	Hickman	0.90	8.40	36.66010	-89.03423	36.64563	-89.11442	2020
KY-2007	KY506521_01	Rename			Wheel Rim Fork 0.0 to 3.1	Mouth to Headwaters	River/Stream	506521	3.10	MILES	2012	5	Licking River	Morgan	0.00	3.10	37.74429	-83.24330	37.71685	-83.27071	2020
KY-2008	KY506547_01	Rename			Whetstone Creek 1.35 to 3.5	Mill Branch to land use change	River/Stream	506547	2.15	MILES	2010	5	Little Sandy River	Greenup	1.35	3.50	38.56033	-82.87987	38.56474	-82.91388	2020
KY-2009	KY506557_01	Rename			Whippoorwill Creek 0.0 to 13.25	Mouth to Vicks Branch	River/Stream	506557	13.25	MILES	2020	2B	Lower Cumberland River	Logan	0.00	13.25	36.66542	-86.96358	36.75031	-86.99644	2020
KY-2717					Whippoorwill Creek 13.25 to 45.4	Vicks Branch to Headwaters	River/Stream	506557	32.15	MILES	2020	3	Lower Cumberland River	Logan, Todd	13.25	45.40	36.75031	-86.99644	36.87052	-87.16637	2020
KY-2010	KY506557-40.5_01	Rename			Whippoorwill Creek UT 0.0 to 1.2	Whippoorwill Creek to UT to UT to Whippoorwill Creek	River/Stream	506557	1.20	MILES	2014	2	Lower Cumberland River	Todd	0.00	1.20	36.84848	-87.10579	36.83231	-87.11206	2020
KY-2011	KY506579_01	Rename			White Creek 0.0 to 2.2	Mouth to Loss of Riparian Zone	River/Stream	506579	2.20	MILES	2012	5	Lower Cumberland River	Christian	0.00	2.20	36.88458	-87.47448	36.90912	-87.48060	2020
KY-2012	KY506590_01	Rename			White Lick Creek 0.0 to 2.9	Mouth to Conn Branch	River/Stream	506590	2.90	MILES	2000	5	Kentucky River	Garrard	0.00	2.90	37.61147	-84.39887	37.57700	-84.41379	2020
KY-2615	KY516320_01	Rename			White Oak Creek 0.0 to 1.0	Mouth to Little White Oak Creek	River/Stream	516320	1.00	MILES	2016	5	Upper Cumberland River	Laurel	0.00	1.00	37.09095	-84.20402	37.10204	-84.19966	2020
KY-120	KY485709_01	Rename			White Oak Creek 0.0 to 1.1	Mouth to MP 1.1	River/Stream	485709	1.10	MILES	1998	5	Tygarts Creek	Greenup	0.00	1.10	38.56960	-82.95214	38.57055	-82.96515	2020
KY-3250					White Oak Creek 0.0 to 1.75	Mouth to Culvert Along KY-693 Diederick Boulevard	River/Stream	506615	1.75	MILES	2020	3	Ohio River	Greenup	0.00	1.75	38.51661	-82.68142	38.50421	-82.68801	2020
KY-2017	KY506613_01	Rename			White Oak Creek 0.0 to 3.15	Mouth to Headwaters	River/Stream	506613	3.15	MILES	2008	5	Kentucky River	Garrard, Lincoln	0.00	3.15	37.59309	-84.61844	37.61711	-84.58000	2020
KY-2013	KY506612_01	Rename			White Oak Creek 0.0 to 3.4	Mouth to UT	River/Stream	506612	3.40	MILES	2008	4A	Kentucky River	Lincoln, Boyle	0.00	3.40	37.55606	-84.77962	37.56480	-84.81726	2020
KY-2614	KY516318_01	Rename			White Oak Creek 0.0 to 4.15	Mouth to Headwaters	River/Stream	516318	4.15	MILES	2020	5	Upper Cumberland River	McCreary	0.00	4.15	36.70228	-84.59731	36.69208	-84.65845	2020
KY-2617	KY516322_01	Rename			White Oak Creek 1.0 to 2.1	Above Land Use Change to Land Use Change	River/Stream	516322	1.10	MILES	2002	2	Upper Cumberland River	Rockcastle	1.00	2.10	37.33504	-84.15417	37.34897	-84.15732	2020
KY-2616	KY516320_02	Rename			White Oak Creek 1.0 to 5.75	Little White Oak Creek to Headwaters	River/Stream	516320	4.75	MILES	2010	2	Upper Cumberland River	Laurel	1.00	5.75	37.10204	-84.19978	37.15106	-84.18823	2020
KY-3172					White Oak Creek 2.1 to 4.7	Loss of forested buffer to headwaters	River/Stream	506624	2.60	MILES	2020	3	Green River	Adair	2.10	4.70	37.22974	-85.23197	37.26158	-85.24637	2020
KY-2018	KY506623_01	Rename			White Oak Creek 7.2 to 11.35	Burton Branch to Little White Oak Creek	River/Stream	506623	4.15	MILES	2008	5	Upper Cumberland River	Pulaski	7.20	11.35	37.00312	-84.75195	37.03723	-84.75735	2020
KY-2016	KY506612-4.5_01	Rename			White Oak Creek UT 0.0 to 0.85	Mouth to Forested UT	River/Stream	506612	0.85	MILES	2016	4A	Kentucky River	Boyle	0.00	0.85	37.56350	-84.83240	37.57005	-84.84330	2020
KY-2015	KY506612-3.4_01	Rename			White Oak Creek UT 0.0 to 2.2	Mouth to Headwaters	River/Stream	506612	2.20	MILES	2016	4A	Kentucky River	Boyle	0.00	2.20	37.56480	-84.81726	37.58971	-84.83768	2020
KY-2014	KY506612-2.0_01	Rename			White Oak Creek UT 0.0 to 2.45	Mouth to Headwaters	River/Stream	506612	2.45	MILES	2016	4A	Kentucky River	Lincoln, Boyle	0.00	2.45	37.56809	-84.79587	37.59422	-84.80957	2020
KY-2794		Split	KY-2019	KY506624-2.2_01	White Oak Creek UT 0.4 to 2.9	CR-1073 Hovious Ridge Road to KY-76 Elkhorn Road	River/Stream	506624	2.50	MILES	2008	2	Green River	Adair	0.40	2.90	37.23736	-85.22392	37.26178	-85.19616	2020
KY-2795		Split	KY-2019	KY506624-2.2_01	White Oak Creek UT 2.8 to 3.2	KY-76 Elkhorn Road to Headwaters	River/Stream	506624	0.40	MILES	2020	2	Green River	Adair	2.80	3.20	37.26178	-85.19616	37.26593	-85.19515	2020
KY-2020	KY506672_01	Rename			Whites Creek 0.6 to 3.6	Underground to Silver Run	River/Stream	506672	3.00	MILES	2004	2	Big Sandy River	Boyd	0.60	3.60	38.33574	-82.59375	38.32163	-82.61260	2020
KY-2021	KY506681_01	Rename			Whiteside Creek 1.9 to 2.85	3rd UT on North Side to Outfall	River/Stream	506681	0.95	MILES	2008	3	Tradewater River	Webster	1.90	2.85	37.45744	-87.67253	37.45924	-84.65562	2020
KY-2618	KY516339_01	Rename			Whitley Branch 0.0 to 1.0	Mouth to London POTW	River/Stream	516339	1.00	MILES	2012	4A	Upper Cumberland River	Laurel	0.00	1.00	37.10173	-84.05538	37.10536	-84.06986	2020
KY-2619	KY516339_02	Rename			Whitley Branch 1.0 to 2.2	London POTW to Headwaters	River/Stream	516339	1.20	MILES	1998	4A	Upper Cumberland River	Laurel	1.00	2.20	37.10537	-84.06987	37.11834	-84.08174	2020
KY-2022	KY506716-3.9_01	Rename			Wiggington Creek UT 0.9 to 2.05	0.4 miles above SR 1039 to 0.2 miles below headwaters	River/Stream	506716	1.15	MILES	2004	5	Green River	Logan	0.90	2.05	36.88178	-86.77860	36.87172	-86.76684	2020
KY-2620	KY516358_01	Rename			Wild Dog Creek 0.0 to 0.6	Mouth to Dry Fork	River/Stream	516358	0.60	MILES	2010	2	Kentucky River	Owsley	0.00	0.60	37.48730	-83.82319	37.48235	-83.82972	2020

KY-2621	KY516359_01	Rename			Wildcat Branch 0.0 to 2.5	Mouth to Headwaters	River/Stream	516359	2.50	MILES	2006	4A	Upper Cumberland River	Pulaski	0.00	2.50	36.97364	-84.44140	36.98778	-84.40419	2020
KY-3154					Wildcat Branch UT 0.0 to 0.25	Mouth to headwaters	River/Stream	516359	0.25	MILES	2020	5	Upper Cumberland River	Pulaski	0.00	0.25	36.97824	-84.42390	36.97854	-84.41941	2020
KY-3133					Wildcat Branch UT 0.0 to 0.35	Mouth to pond	River/Stream	516359	0.35	MILES	2020	5	Upper Cumberland River	Pulaski	0.00	0.35	36.97688	-84.42599	36.98116	-84.42841	2020
KY-3132					Wildcat Branch UT 0.0 to 0.4	Mouth to headwaters	River/Stream	516359	0.40	MILES	2020	5	Upper Cumberland River	Pulaski	0.00	0.40	36.98468	-84.41579	36.99012	-84.41409	2020
KY-3155					Wildcat Branch UT 0.0 to 0.45	Mouth to headwaters	River/Stream	516359	0.45	MILES	2020	5	Upper Cumberland River	Pulaski	0.00	0.45	36.98355	-84.42008	36.98941	-84.42122	2020
KY-3153					Wildcat Branch UT 0.4 to 0.95	Pond to headwaters	River/Stream	516359	0.55	MILES	2020	5	Upper Cumberland River	Pulaski	0.40	0.95	36.98219	-84.42917	36.98927	-84.42808	2020
KY-3156					Wildcat Branch UT to UT 0.0 to 0.35	Mouth to headwaters	River/Stream	516359	0.35	MILES	2020	3	Upper Cumberland River	Pulaski	0.00	0.35	36.97950	-84.42644	36.98448	-84.42468	2020
KY-2798		Split	KY-2023	KY506731_01	Wildcat Creek 1.3 to 3.4	Kentucky Lake Backwaters to CR-1131 Wright Road	River/Stream	506731	2.10	MILES	2006	2	Tennessee River	Calloway	1.30	3.40	36.60822	-88.15358	36.61320	-88.18308	2020
KY-2799		Split	KY-2023	KY506731_01	Wildcat Creek 3.4 to 6.7	CR-1131 Wright Road to pond near headwaters	River/Stream	506731	3.30	MILES	2020	2	Tennessee River	Calloway	3.40	6.70	36.61320	-88.18308	36.61511	-88.23306	2020
KY-2	KY0066_00	Rename			William F. Miles Angler Lake	Entire Reservoir	Lake/Reservoir	554	4	ACRES	2008	2	Salt River	Jefferson			38.23055	-85.46687	38.23177	-85.46374	2020
KY-2025	KY506818_01	Rename			Williams Creek 0.0 to 2.85	Mouth to Straight Creek	River/Stream	506818	2.85	MILES	2010	5	Little Sandy River	Boyd	0.00	2.85	38.42943	-82.76176	38.40043	-82.76021	2020
KY-2024	KY506817_01	Rename			Williams Creek 0.0 to 5.85	Mouth to Coffee Creek and White Oak Branch	River/Stream	506817	5.85	MILES	2020	5	Licking River	Morgan	0.00	5.85	37.94725	-83.16024	37.90589	-83.09953	2020
KY-2026	KY506823_01	Rename			Williams Fork 0.0 to 0.2	Mouth to Point of Discharge	River/Stream	506823	0.20	MILES	2010	3	Big Sandy River	Johnson	0.00	0.20	37.86342	-82.80049	37.86519	-82.80320	2020
KY-2027	KY506839_00	Rename			Williamstown Lake	Entire Reservoir	Lake/Reservoir	506839	339	ACRES	2020	2	Licking River	Grant			38.67694	-84.51854	38.67177	-84.55749	2020
KY-2028	KY506852_00	Rename			Willisburg Lake	Entire reservoir	Lake/Reservoir	506852	120	ACRES	2020	5	Salt River	Washington			37.82730	-85.16288	37.81985	-85.13725	2020
KY-2029	KY506866_01	Rename			Willow Creek 0.0 to 6.7	Mouth to UT (large 2nd order)	River/Stream	506866	6.70	MILES	2010	2	Licking River	Bracken	0.00	6.70	38.58582	-84.17635	38.63013	-84.16426	2020
KY-3329		Split	KY-2034	KY506901_01	Wilson Creek 0.0 to 1.5	Mouth to UT/Oxbow	River/Stream	506901	1.50	MILES	2006	5	Salt River	Bullitt, Nelson	0.00	1.50	37.81175	-85.73781	37.80838	-85.72047	2020
KY-2031	KY506898_01	Rename			Wilson Creek 0.0 to 2.15	Mouth to Heflin Creek	River/Stream	506898	2.15	MILES	2020	5	Mississippi River	Carlisle	0.00	2.15	36.94030	-88.89459	36.91860	-88.86772	2020
KY-2030	KY506897_01	Rename			Wilson Creek 0.0 to 2.9	Mouth to Headwaters	River/Stream	506897	2.90	MILES	2010	5	Big Sandy River	Floyd	0.00	2.90	37.52714	-82.80111	37.55453	-82.82667	2020
KY-2036	KY506904_01	Rename			Wilson Creek 0.0 to 5.6	Mouth to Headwaters	River/Stream	506904	5.60	MILES	2014	4A	Salt River	Jefferson, Bullitt	0.00	5.60	38.12508	-85.75958	38.08267	-85.72223	2020
KY-2033	KY506900_01	Rename			Wilson Creek 0.0 to 6.9	Mouth to Headwaters	River/Stream	506900	6.90	MILES	2014	5	Ohio River	Henderson	0.00	6.90	37.79838	-87.62168	37.75451	-87.69165	2020
KY-3171					Wilson Creek 1.4 to 6.7	Green River Lake backwaters to headwaters	River/Stream	506903	5.30	MILES	2020	3	Green River	Taylor	1.40	6.70	37.28330	-85.26062	37.30776	-85.19095	2020
KY-2720					Wilson Creek 1.5 to 8.7	UT/Oxbow to Rattlesnake Run Confluence	River/Stream	506901	7.20	MILES	2020	3	Salt River	Bullitt, Nelson	1.50	8.70	37.80838	-85.72047	37.83438	-85.64261	2020
KY-2851					Wilson Creek 15.4 to 17.95	Nelson Creek and land use change to headwaters	River/Stream	506901	2.55	MILES	2020	3	Salt River	Nelson	15.40	17.95	37.88503	-85.57632	37.87649	-85.55502	2020
KY-2032	KY506898_02	Rename			Wilson Creek 2.15 to 8.0	Heflin Creek to Goose Creek	River/Stream	506898	5.85	MILES	2000	2	Mississippi River	Carlisle, Graves	2.15	8.00	36.88118	-88.78048	36.91860	-88.86772	2020
KY-2035	KY506901_02	Rename			Wilson Creek 8.7 to 15.4	Rattlesnake Run Confluence to Nelson Creek and land use change	River/Stream	506901	6.70	MILES	2020	2	Salt River	Bullitt, Nelson	8.70	15.40	37.83438	-85.64261	37.88503	-85.57632	2020
KY-3330		Split	KY-2034	KY506901_01	Wilson Creek UT (Oxbow) 0.0 to 0.7	Mouth to UT before re-connection with Wilson Creek	River/Stream	506901	0.70	MILES	2006	5	Salt River	Bullitt, Nelson	0.00	0.70	37.80838	-85.72047	37.80648	-85.72120	2020
KY-2037	KY506915_01	Rename			Wilson Run 0.0 to 5.0	Mouth to Headwaters	River/Stream	506915	5.00	MILES	2002	4A	Licking River	Fleming	0.00	5.00	38.41214	-83.69541	38.41214	-83.63827	2020
KY-2038	KY506926_00	Rename			Winchester Reservoir	Dam to Lake Boundaries	Lake/Reservoir	506926	94	ACRES	2016	2	Kentucky River	Clark			37.94900	-84.22987	37.96323	-84.24637	2020
KY-2039	KY506974_01	Rename			Withrow Creek 0.0 to 3.9	Mouth to Headwaters	River/Stream	506974	3.90	MILES	2006	5	Salt River	Nelson	0.00	3.90	37.80252	-85.49165	37.84221	-85.46325	2020
KY-2040	KY506990_01	Rename			Wolf Branch Ditch 0.0 to 4.45	Mouth to Headwaters	River/Stream	506990	4.45	MILES	2002	5	Green River	Daviess	0.00	4.45	37.65818	-87.14884	37.63562	-87.18675	2020
KY-2041	KY506998_01	Rename			Wolf Creek 0.0 to 1.05	Mouth to UT	River/Stream	506998	1.05	MILES	2004	5	Tradewater River	Crittenden	0.00	1.05	37.37795	-87.85514	37.37269	-87.86427	2020
KY-2622	KY516433_01	Rename			Wolf Creek 0.0 to 2.0	Mouth to Little Wolf Creek	River/Stream	516433	2.00	MILES	2000	5	Upper Cumberland River	Whitley	0.00	2.00	36.66309	-84.13344	36.65715	-84.15623	2020
KY-2042	KY507001_01	Rename			Wolf Creek 0.0 to 6.6	Mouth to Pigeon Roost Fork	River/Stream	507001	6.60	MILES	2016	5	Big Sandy River	Martin	0.00	6.60	37.82579	-82.39892	37.78351	-82.44481	2020
KY-2044	KY507001_03	Rename			Wolf Creek 17.7 to 20.55	Panther Fork to Headwaters	River/Stream	507001	2.85	MILES	2020	5	Big Sandy River	Martin	17.70	20.55	37.72930	-82.55910	37.69617	-82.58043	2020
KY-2043	KY507001_02	Rename			Wolf Creek 6.6 to 17.7	Pigeonroost Fork to Panther Fork	River/Stream	507001	11.10	MILES	2010	5	Big Sandy River	Martin	6.60	17.70	37.78359	-82.44449	37.72930	-82.55910	2020
KY-2045	KY507017_01	Rename			Wolf Lick Creek 0.0 to 14.6	Mouth to Elk Lick Creek	River/Stream	507017	14.60	MILES	2020	5	Green River	Logan	0.00	14.60	37.06272	-86.94333	36.98233	-86.99681	2020
KY-2046	KY507029_01	Rename			Wolf Run 0.0 to 4.3	Mouth to Headwaters (Created UT)	River/Stream	507029	4.30	MILES	2016	5	Kentucky River	Fayette	0.00	4.30	38.07359	-84.55354	38.02483	-84.52781	2020
KY-2047	KY507029-2.0_01	Rename			Wolf Run UT 0.0 to 0.7	Mouth to Pond Dam	River/Stream	507029	0.70	MILES	2016	4A	Kentucky River	Fayette	0.00	0.70	38.04940	-84.55135	38.04168	-84.55601	2020
KY-1610	KY507039_01	Rename			Wolfpen Branch 0.0 to 1.0	Mouth to Headwaters	River/Stream	507039	1.00	MILES	2016	5	Kentucky River	Perry	0.00	1.00	37.35460	-83.16161	37.34381	-83.16940	2020
KY-2048	KY507038_01	Rename			Wolfpen Branch 0.0 to 1.85	Mouth to Headwaters	River/Stream	507038	1.85	MILES	2004	5	Big Sandy River	Pike	0.00	1.85	37.29869	-82.30932	37.31998	-82.30293	2020
KY-2623	KY516462_01	Rename			Wolfpen Creek 0.0 to 3.7	Mouth to Headwaters	River/Stream	516462	3.70	MILES	1998	2	Kentucky River	Menifee	0.00	3.70	37.82542	-83.63100	37.87116	-83.63010	2020
KY-2624	KY516466_01	Rename			Wood Creek 0.0 to 1.95	Mouth to Wood Creek Reservoir Dam	River/Stream	516466	1.95	MILES	2008	5	Upper Cumberland River	Laurel	0.00	1.95	37.23223	-84.19927	37.21478	-84.19935	2020
KY-2625	KY516467_00	Rename			Wood Creek Lake	Dam to Lake Boundaries	Lake/Reservoir	516467	645	ACRES	2020	2	Upper Cumberland River	Laurel			37.21477	-84.19934	37.16086	-84.14794	2020
KY-1611	KY507110_01	Rename			Woodruff Creek 0.0 to 3.8	Mouth to Headwaters	River/Stream	507110	3.80	MILES	2020	5	Licking River	Clark	0.00	3.80	38.02742	-84.15174	38.06990	-84.17842	2020
KY-121	KY485711_01	Rename			Woolper Creek 1.4 to 7.45	Ohio River Backwater to Allen Fork Confluence	River/Stream	485711	6.05	MILES	2016	2	Ohio River	Boone	1.40	7.45	39.02805	-84.84889	39.03631	-84.76495	2020
KY-122	KY485711_02	Rename			Woolper Creek 7.45 to 14.2	Allen Fork to Headwaters	River/Stream	485711	6.75	MILES	2016	5	Ohio River	Boone	7.45	14.20	39.03629	-84.76486	39.06541	-84.70179	2020
KY-123	KY485711-8.0_01	Rename			Woolper Creek UT 0.0 to 3.4	Mouth to UT of UT and Encroaching Commercial Area	River/Stream	485711	3.40	MILES	2016	5	Ohio River	Boone	0.00	3.40	39.04253	-84.76141	39.04959	-84.71490	2020
KY-2626	KY516483_01	Rename			Wooton Creek 0.0 to 3.1	Mouth to Second Fork	River/Stream	516483	3.10	MILES	2000	5	Kentucky River	Leslie	0.00	3.10	37.17808	-83.30419	37.17567	-83.27047	2020
KY-53	KY2742357_00	Rename			Yatesville Lake	Dam to Lake Boundaries	Lake/Reservoir	2742357	2295	ACRES	2016	2	Big Sandy River	Lawrence			38.12543	-82.69852	38.05120	-82.82776	2020
KY-1612	KY507211_01	Rename			Yellow Creek 0.0 to 6.65	Mouth to Clear Fork	River/Stream	507211	6.65	MILES	2020	2B	Upper Cumberland River	Bell	0.00	6.65	36.71985	-83.64194	36.66546	-83.66522	2020
KY-1613	KY507211_02	Rename			Yellow Creek 6.65 to 15.8	Clear Fork to Little Yellow Creek	River/Stream	507211	9.15	MILES	2008	2	Upper Cumberland River	Bell	6.65	15.80	36.66546	-83.66522	36.61311	-83.70860	2020
KY-1614	KY507216_01	Rename			Yellow Creek ByPass 0.0 to 2.7	Mouth to Bennetts Fork	River/Stream	507216	2.70	MILES	2008	2	Upper Cumberland River	Bell	0.00	2.70	36.62867	-83.70763	36.61580	-83.73770	2020
KY-2627	KY516507_01	Rename			Yellowbank Creek 1.5 to 11.8	Ohio River Backwaters to Headwaters	River/Stream	516507	10.30	MILES	2012	2	Salt River	Breckinridge	1.50	11.80	37.98107	-86.50521	37.95294	-86.40142	2020
KY-1615	KY507228_01	Rename			Yocum Creek 0.0 to 6.5	Mouth to Cloud Branch	River/Stream	507228	6.50	MILES	2008	4A	Upper Cumberland River	Harlan	0.00	6.50	36.86595	-83.19288	36.84414	-83.09425	2020
KY-2049	KY507254_01	Rename			Younger Creek 0.0 to 4.5	Mouth to habitat change	River/Stream	507254	4.50	MILES	2006	5	Salt River	Hardin	0.00	4.50	37.75832	-85.69896	37.71999	-85.74370	2020
KY-2628	KY516519_01	Rename			Youngs Creek 0.0 to 5.6	Mouth to 2nd Order UT	River/Stream	516519	5.60	MILES	2000	2	Upper Cumberland River	Whitley	0.00	5.60	36.77662	-84.20605	36.83845	-84.22575	2020

Addendum to the CALM: Kentucky's Updated Fish Consumption Methodology

Commonwealth of Kentucky

Energy and Environment Cabinet

Department for Environmental Protection

Division of Water

Effective Date: January 16th, 2020

Action By	Signature	Date
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Commonwealth of Kentucky

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Introduction

Fish consumption is not a designated use per state regulation. However, there exists human health criteria in water quality standards for the protection of the population should they choose to catch local fish for consumption. Applicable criteria can be found in WQS 401 KAR 10:031 Sections 2 and 6. Section 2(3) states:

The water quality criteria for the protection of human health related to fish consumption in Table 1 of Section 6 of this administrative regulation shall apply to all surface water at the edge of the assigned mixing zones except for those points where water is withdrawn for domestic water supply use.

> (a) The criteria are established to protect human health regarding the consumption of fish tissue and shall not be exceeded.
>
> (b) For those substances associated with a cancer risk, an acceptable risk level of not more than one (1) additional cancer case in a population of 1,000,000 people, or 1×10^{-6} shall be utilized to establish the allowable concentration.

Unlike other designated uses, attainment is divided into two categories, full support and nonsupport, when considering tissue data, and into three categories, full support, partial support, and nonsupport, when considering water column data. Full support means that water quality standards are being met, while partial or nonsupport means that water quality standards are not being met; therefore, the parameter is identified as impairing the designated use.

This designated use is assessed for dammed waterbodies (reservoirs) or natural lakes, and for flowing water. Since the type and size of fish available for tissue analysis varies greatly from a lake to a small headwater stream, a hierarchy of sample collection and processing methods are outlined below in order of preference. Field biologists apply this hierarchy when sampling fish for tissue analysis, and may have to implement a different method for the different trophic levels that are being targeted as outlined in the project's study plan (e.g. trophic level 4 and 3 fish may be collected as part of a fish advisory study, where the fillet of fish from trophic level 4 can be analyzed individually, while the fillet of fish from trophic level 3 may be analyzed as a composite).

Collection and Processing Methods:

1. Fish large enough to produce a fillet
    a. Right fillet analyzed individually, or
    b. If size of fish warrants both fillets to meet tissue requirements, right and left fillets can be analyzed together
2. Fish of size that would not produce enough tissue for individual fillet analysis (right or right and left combined) but a fillet can be produced
    a. Composite fillet samples produced and analyzed
3. Fish of size where a fillet cannot be produced but an entire fish would provide enough tissue for individual analysis
    a. Each whole body analyzed individually
4. Fish of size that would not produce enough tissue for individual fish analysis, even as a whole body
    a. Composite whole body samples produced and analyzed

Mercury in Fish Tissue

Table 1 in Section 6 of 401 KAR 10:031 has a numeric water quality criterion for methylmercury in fish tissue of 0.3 mg/Kg.

The water quality standard (WQS) is set at 0.3 mg/Kg wet weight methylmercury in fish tissue and can be expressed as either a fillet or whole body sample. In Kentucky, methylmercury accounts for approximately 98% of the total mercury in fish tissue (Figure 1). Per guidelines from the United States Environmental Protection Agency (USEPA) (2010), the use of total mercury is acceptable in the assessment process, and "when measuring only mercury, the state or authorized tribe might make the conservative assumption that all mercury in fish tissue is methylmercury". From here forward, the parameter will simply be referred to as 'Mercury in Fish Tissue', knowing either total or methylmercury is acceptable.

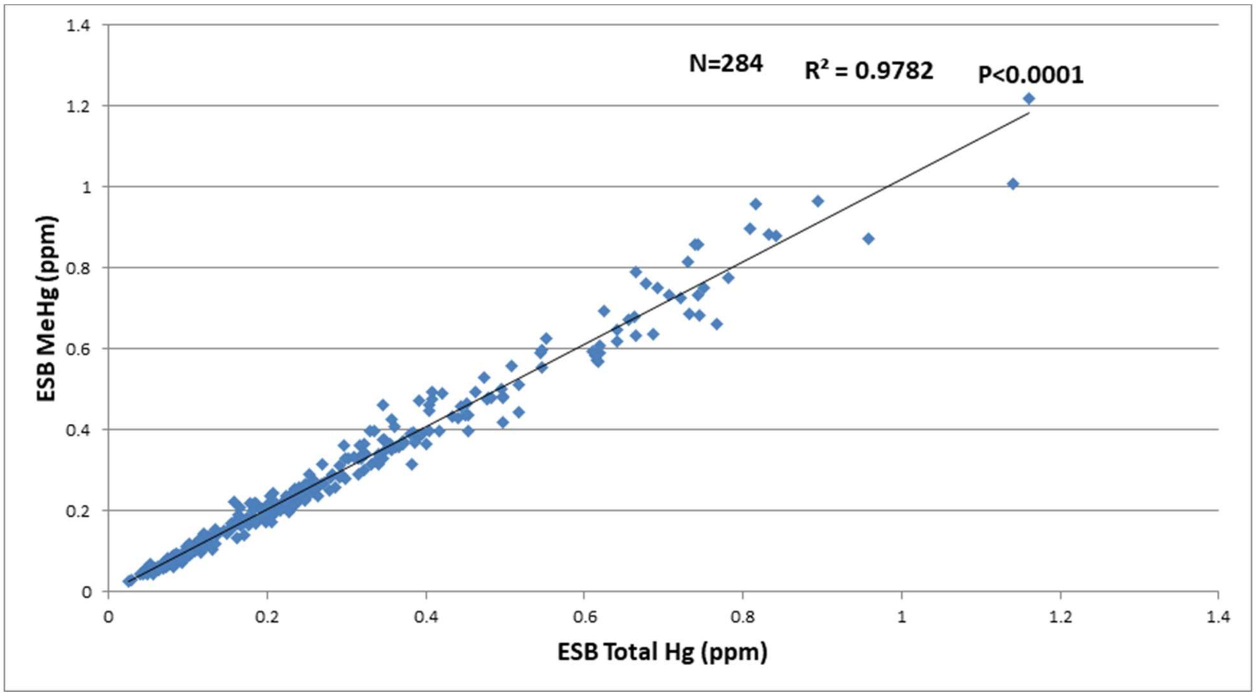

Figure 1. Relationship between total mercury and methylmercury (ppm) for 284 fish samples collected in Kentucky and analyzed by the Department of Environmental Program Support (DEPS) laboratory (formerly referred to as Environmental Services Branch (ESB) as referenced in figure), where methylmercury accounts for approximately 98% of total mercury.

Data Requirements

When determining use attainment for the fish consumption designated use for the parameter 'Mercury in Fish Tissue', predator fish (Table 1) must be collected to make a full support attainment decision, even if other trophic levels were collected and analyzed for mercury. However, if other trophic levels are collected, how to track this information, and how it may impact parameter attainment, is outlined in the section below entitled 'Supplementary Data to Track'.

Table 1. Target predator species (Trophic Level 4) for collection by the Kentucky Division of Water (DOW 2018, Draft).

Desired Order	Common Name	Scientific Name
1a	Largemouth	*Micropterus salmoides*
1b	Spotted	*M. punctulatus*
1c	Smallmouth	*M. dolomieu*
2	White Bass	*Morone chrysops*
3	Walleye	*Sander vitreus*
4	Sauger	*Sander canadensis*

The following data requirements apply:

- Fish Species: Largemouth Bass (*Micropterus salmoides)* or other *Micropterus* sp.
    - If outside agencies collect different fish species, predator fish (trophic level 4) as outlined in Table 1 will be considered for assessment purposes
- Size of Largemouth Bass: 12 inches or larger
    - If 12-inch bass are not available, the largest fish available should be retained for analysis
    - If predator species other than Largemouth Bass are used, the Minimum Size Limit or larger should be retained for analysis (as determined by Kentucky Fish and Wildlife's Fishing and Boating Guide)
        - If target size fish are not available, then the largest fish sampled should be retained for analysis
        - If no minimum size is provided, then the largest fish sampled should be retained for analysis
- A minimum of 10 Largemouth Bass (or other trophic 4 species if determined appropriate) from a single waterbody
    - Samples collected in a 1 – 5 year time frame will be considered to achieve 10 individual fish for assessment purposes, or
    - Samples collected at multiple sites within the same assessment unit will be considered to achieve 10 individual fish for assessment purposes
- If fillets or whole bodies are being composited, a minimum of two five-fish composite samples shall meet the following requirements:
    - All individuals of the same species
    - Similar in size so that the smallest individual in a composite is no less than 75% of the total length of the largest individual
    - Collected at the same time
- Use a skinless fillet if applicable
- Convert dry weight to wet weight, if necessary

Attainment Decision for Mercury in Fish Tissue

If fish were analyzed individually as a fillet or as a whole body, and the assessment data requirements were met, then attainment is determined as such:

- Full Support: If the median is ≤ 0.3 mg/Kg mercury

    - In KATTS, the indicator ‘Mercury in Fish Tissue (predator) <= WQS’ should be used, and the parameter status “Full Support” should accompany the parameter ‘Mercury in Fish Tissue’
- Nonsupport: If the median is > 0.3 mg/Kg mercury
    - In KATTS, the indicator ‘Mercury in Fish Tissue (predator) > WQS’ should be used, and the parameter status “Nonsupport” should accompany the parameter ‘Mercury in Fish Tissue’
- Additional Considerations
    - If some of the fish analyzed are below the detection limit, and some are above, then use the detection limit to calculate the median
        - If this value is ≤ 0.3 mg/Kg mercury, then a full support attainment decision is supported
        - If this value is > 0.3 mg/Kg mercury, then how many fish were non-detect and the concentration of the fish that had detection should be considered before making a nonsupport attainment decision

If fish were analyzed as a fillet composite or as a whole body composite, and the assessment data requirements were met, then attainment is determined as such:

- Full Support: The median of two or more composite samples is ≤ 0.3 mg/Kg of mercury
    - In KATTS, the indicator ‘Mercury in Fish Tissue (predator) <= WQS’ should be used, and the parameter status “Full Support” should accompany the parameter ‘Mercury in Fish Tissue’
- Nonsupport: The median of two or more composite samples is > 0.3 mg/Kg of mercury
    - In KATTS, the indicator ‘Mercury in Fish Tissue (predator) > WQS’ should be used, and the parameter status “Nonsupport” should accompany the parameter ‘Mercury in Fish Tissue’
- Additional Considerations
    - Often, 2 to 5 composite samples are collected from a waterbody. If some of the composite samples are > 0.3 mg/Kg, while others are ≤ 0.3 mg/Kg of mercury:
        - An attainment decision does not have to be made and the parameter status “Insufficient” should accompany the parameter ‘Mercury in Fish Tissue’ and further data collection should take place before making an attainment decision.
        - If an attainment decision is made, one should consider if the median was above or below 0.3 mg/Kg of mercury, the magnitude of the individual exceedances, and the listing history. The appropriate indicator should accompany the parameter and parameter status, and the resulting attainment decision should be well documented in KATTS.

Supplementary Data to Track

Predator fish are required for analysis of the Fish Consumption designated use when determining if the parameter ‘Mercury in Fish Tissue’ is meeting WQS. However, the Kentucky Division of Water (DOW) also collects and analyzes panfish (trophic level 3), such as bluegill, for mercury. The potential for bioaccumulation of mercury exists in lower trophic levels, and therefore the assessment method requires documentation of attainment of the mercury fish tissue standard in panfish, when available.

The Kentucky DOW collects panfish as outlined in Table 2. Most often, panfish are collected and analyzed as described in Method 2, where two or more composite fillet samples are produced and analyzed.

Table 2. Target panfish species (Trophic Level 3) for collection by the Kentucky Division of Water (DOW 2018, Draft).

Desired Order	Common Name	Scientific Name
1a	Bluegill	*Lepomis macrochirus*
1b	Other sunfish	*L. sp.*
2	Crappie	*Pomoxis* sp.
3	Rock Bass	*Ambloplites rupestris*

The data requirements for considering panfish for attainment are as follows:

- Fish Species: Bluegill (*Lepomis macrochirus)* or any other panfish outlined in Table 2 if bluegill not collected
- Size of Fish: the Minimum Size Limit or larger should be retained for analysis (as determined by Kentucky Fish and Wildlife's Fishing and Boating Guide)
    - If target size fish are not available, then the largest fish sampled should be retained for analysis
    - If no minimum size is provided, then the largest fish sampled should be retained for analysis
- A minimum of 10 fish from a single waterbody
    - Samples collected in a 1 – 5 year time frame will be considered to achieve 10 individual fish for assessment purposes, or
    - Samples collected at multiple sites within the same assessment unit will be considered to achieve 10 individual fish for assessment purposes
- When fillets are composited, a minimum of two five-fish composite samples shall meet the following requirements:
    - All individuals of the same species
    - Similar in size so that the smallest individual in a composite is no less than 75% of the total length of the largest individual
    - Collected at the same time
- Use a skinless fillet if applicable
- Convert dry weight to wet weight, if necessary

Attainment for panfish shall use the following guidelines:

- Full Support: The median of two or more composite samples is ≤ 0.3 mg/Kg of mercury
    - In KATTS, the indicator 'Mercury in Fish Tissue (panfish) <= WQS' should be used in conjunction with the predator indicator, which determines the parameter status
        - If no predator fish were collected, the parameter status "Insufficient" should be used
- Nonsupport: The median of two or more composite samples is > 0.3 mg/Kg of mercury
    - In KATTS, the indicator 'Mercury in Fish Tissue (panfish) > WQS' should be used in conjunction with the predator indicator

    - If predator fish OR panfish exceeds the WQS (even if no predator fish were collected), then the parameter status "Non Support" should be used
- If some of the composite samples are ≤ 0.3 mg/Kg, while other composite samples are > 0.3 mg/Kg of mercury, the indicator 'Mercury in Fish Tissue (panfish) <= WQS' or 'Mercury in Fish Tissue (panfish) > WQS' should be used, depending on if the median was ≤ or > 0.3 mg/Kg, in conjunction with the predator indicator
    - If the predator fish indicator suggests "Non Support", then the parameter status "Non Support" should be used
    - If both the predator fish and panfish indicators suggest "Full Support", then the parameter status "Full Support" should be used
    - If the predator fish indicator suggests "Full Support" and the panfish indicator suggests "Non Support", then either "Non Support" or "Insufficient" should be used for the parameter status, with a comment explaining the decision for the selected parameter status
        - A final attainment decision is at the discretion of the assessor
    - If no predator fish were collected, then the parameter status "Non Support" or "Insufficient" should be used, with a comment explaining the decision for the selected parameter status
        - A final attainment decision is at the discretion of the assessor

To reiterate, panfish alone cannot be used to determine that the parameter 'Mercury in Fish Tissue' is fully supported; predator fish are required for a full support determination of the parameter. However, if the data exists, the levels of mercury in panfish, which are often the type of fish people consume, can be related to attainment as described above, and then appropriately noted and tracked in the KATTS application. This same schematic could be applied to other groups of fish, such as bottom feeders, where data requirements are met for analysis.

Delisting Requirements

To delist, an effort should be made to match or exceed the data set used in the original assessment, considering species, size class, tissue type, and number of fish. In some cases, newer data that does not meet or exceed the original data set may be used for delisting, and the decision for why this is acceptable will be well documented in the KATTS application.

When individual fish are analyzed:

- If, in the most recent data set, the median is ≤ 0.3 mg/Kg of mercury, then mercury in fish tissue will be proposed for delisting.

When composites are analyzed:

- If, in the most recent data set, the median of the composite samples is ≤ 0.3 mg/Kg of mercury, and a majority of the composite samples have a concentration ≤ 0.3 mg/Kg of mercury, then mercury in fish tissue will be proposed for delisting.
    - It is unlikely that composite samples will be used to delist mercury in fish tissue, as predator fish, which are often large enough to analyze individually, are required for a full support attainment decision.

PCBs in Fish Tissue

The Food and Drug Administration (FDA) protocols for fish consumption advisories for polychlorinated biphenyls (PCBs) are based on fish tissue residue concentrations, and are triggered when tissue residue exceeds 0.2 mg/Kg. Historically, this number (0.2 mg/Kg) had been used for assessment purposes. However, per Kentucky regulation, "For those substances associated with a cancer risk, an acceptable risk level of not more than one (1) additional cancer case in a population of 1,000,000 people, or 1×10^{-6}, shall be utilized to establish the allowable concentration" (401 KAR 10:031, Section 2,3,b). PCBs are classified as a carcinogen (American Cancer Society) and therefore the acceptable risk level as outlined in regulation applies.

In Table 1 (401 KAR 10:031), Kentucky has adopted a water column number (0.000064 µg/L) for PCBs that uses the 1×10^{-6} risk specific dose. The water column number can be used to determine a screening value for fish tissue that also protects to the 1×10^{-6} level for extra cancer risk (USEPA 2000, VA DEQ 2017). When Kentucky's water column number for PCBs is used in this equation with a 1×10^{-6} level for extra cancer risk (as Kentucky standards prescribe), the fish tissue number is 0.002 mg/Kg (USEPA 2000, VA DEQ 2017); two orders of magnitude lower than the FDA number of 0.2 mg/Kg.

The 0.002 mg/Kg screening value for PCBs poses a challenge from the analytical side. At Kentucky's Department for Environmental Protection (DEP) state laboratory, the limit of detection (LOD) in dry weight (DW) is approximately 0.0275 mg/Kg, which, when converted to wet weight (WW), ranges between 0.005 and 0.008 mg/Kg (using 72% – 82% moisture), both of which are greater than the screening value 0.002 mg/Kg PCBs that protects to the 1×10^{-6} risk level. Consequently, 1) all PCB values that are detected or estimated would be above the screening level, and 2) there would be fish with PCB concentrations above the screening level but below the LOD, so the exceedance could not be detected and the risk could not be communicated accurately.

To align more closely with the risk level specified in regulation (1×10^{-6}), while also acknowledging the laboratory limitation in detection (0.005 to 0.008 mg/Kg), the screening value for PCBs in fish tissue will be changed to 0.01 mg/Kg for assessment purposes, protecting at a risk level of 5×10^{-6}. The methodology outlined below has built in conservatism by targeting fish species known to accumulate PCBs at a higher rate, targeting larger fish for analysis, and by requiring at least 10 fish for comparison to the screening value (referred to as SV in name of indicators).

Data Requirements

When determining use attainment for the fish consumption designated use for the parameter 'PCBs in Fish Tissue', bottom feeders (Table 3) must be collected to make a full support attainment decision, even if other trophic levels were collected and analyzed for PCBs. However, if other trophic levels are collected, how to track this information, and how it may impact parameter attainment, is outlined in the section below entitled 'Supplementary Data to Track'.

Table 3. Target bottom feeder species (Trophic Level 3) for collection by the Kentucky Division of Water (DOW 2018, Draft).

Desired Order	Common Name	Scientific Name
1	Channel catfish	*Ictalurus punctatus*
2	Carp	*Cyprinus carpio*
3	Redhorse suckers	*Moxostoma* sp.
4	White Sucker	*Catostomus commersoni*
5	Other sucker species	*Ictiobus* sp., *Carpiodes* sp.

The following data requirements apply:

- Fish Species: Channel catfish (*Ictalurus punctatus)* or other appropriate bottom feeders as outlined in Table 3
- Size of Fish: The Minimum Size Limit or larger should be retained for analysis (as determined by Kentucky Fish and Wildlife's Fishing and Boating Guide)
    - If target size fish are not available, then the largest fish samples should be retained for analysis
    - If no minimum size is provided, then the largest fish sampled should be retained for analysis
- A minimum of 10 fish from a single waterbody
    - Samples collected in a 1 – 5 year time frame will be considered to achieve 10 individual fish for assessment purposes, or
    - Samples collected at multiple sites within the same assessment unit will be considered to achieve 10 individual fish for assessment purposes
- If fillets or whole bodies are being composited, a minimum of two five-fish composite samples shall meet the following requirements:
    - All individuals of the same species
    - Similar in size so that the smallest individual in a composite is no less than 75% of the total length of the largest individual
    - Collected at the same time
- Use a skin-on or -off fillet, when applicable
- Convert dry weight to wet weight, if necessary

Attainment Decisions for PCBs in Fish Tissue

If fish were analyzed individually as a fillet or as a whole body, and the assessment data requirements were met, then attainment is determined as such:

- Full Support: If the median is ≤ 0.01 mg/Kg PCB
    - In KATTS, the indicator 'PCBs in Fish Tissue (bottom feeders) <= WQS' should be used, and the parameter status "Full Support" should accompany the parameter 'PCBs in Fish Tissue'
- Nonsupport: If the median is > 0.01 mg/Kg PCB

    - In KATTS, the indicator 'PCBs in Fish Tissue (bottom feeders) > WQS' should be used, and the parameter status "Nonsupport" should accompany the parameter 'PCBs in Fish Tissue'
- Additional Considerations
    - If some of the fish analyzed are below the detection limit, and some are above, then use the detection limit to calculate the median
        - If this value is ≤ 0.01 mg/Kg PCB, then a full support attainment decision is supported
        - If this value is > 0.01 mg/Kg PCB, then how many fish were non-detect and the concentration of the fish that had detection should be considered before making a nonsupport attainment decision

If fish were analyzed as a fillet composite or as a whole body composite, and the assessment data requirements were met, then attainment is determined as such:

- Full Support: The median of two or more composite samples is ≤ 0.01 mg/Kg PCB
    - In KATTS, the indicator 'PCBs in Fish Tissue (bottom feeders) <= WQS' should be used, and the parameter status "Full Support" should accompany the parameter 'PCBs in Fish Tissue'
- Nonsupport: The median of two or more composite samples is > 0.01 mg/Kg PCB
    - In KATTS, the indicator 'PCBs in Fish Tissue (bottom feeders) > WQS' should be used, and the parameter status "Nonsupport" should accompany the parameter 'PCBs in Fish Tissue'
- Additional Considerations
    - If the concentration of some composite samples are > 0.01 mg/Kg PCB, while other composite samples are ≤ 0.01 mg/Kg PCB
        - An attainment decision does not have to be made and the parameter status "Insufficient" should accompany the parameter 'PCBs in Fish Tissue' and further data collection should take place before making an attainment decision.
        - If an attainment decision is made, one should consider if the median was above or below 0.01 mg/Kg of PCBs, the magnitude of the individual exceedances, and the listing history. The appropriate indicator should accompany the parameter and parameter status, and the resulting attainment decision should be well documented in KATTS.

Supplementary Data to Track

If other trophic levels, such as predator fish or panfish, were collected and analyzed for PCBs, and the minimum data requirements were met, then the appropriate indicators can be entered into the KATTS application. Decisions for attainment of the parameter 'PCBs in Fish Tissue' when considering panfish or predator fish are as follows:

- Full Support: The median is ≤ 0.01 mg/Kg PCB (individual fish or composites)
    - In KATTS, the indicator 'PCBs in Fish Tissue (*panfish or predator as appropriate*) <= SV' should be used in conjunction with the bottom feeder indicator, which determines the parameter status

        - If no bottom feeders were collected, the parameter status "Insufficient" should be used
- Nonsupport: The median is > 0.01 mg/Kg PCB (individual fish or composites)
    - In KATTS, the indicator 'PCBs in Fish Tissue (*panfish or predator as appropriate*) > SV' should be used in conjunction with the bottom feeder indicator
    - If any group (predator, panfish, or bottom feeder) exceeds the SV (even if bottom feeders were not collected), then the parameter status "Non Support" should be used
- If composite samples are being considered, and the concentration of some composite samples are ≤ 0.01 mg/Kg, while other composite samples are > 0.01 mg/Kg of PCBs, the indicator 'PCBs in Fish Tissue (*panfish or predator as appropriate*) <= SV' or 'PCBs in Fish Tissue (*panfish or predator as appropriate*) > SV' should be used, depending on if the median was ≤ or > 0.01 mg/Kg, in conjunction with the bottom feeder indicator
    - If the bottom feeder indicator suggests "Non Support", then the parameter status "Non Support" should be used
    - If both the bottom feeder and the predator fish or panfish indicators suggest "Full Support", then the parameter status "Full Support" should be used
    - If the bottom feeder indicator suggests "Full Support" and the predator fish or panfish indicator suggests "Non Support", then either "Non Support" or "Insufficient" should be used for the parameter status, with a comment explaining the decision for the selected parameter status
        - A final attainment decision is at the discretion of the assessor
    - If no bottom feeders were collected, then the parameter status "Non Support" or "Insufficient" should be used, with a comment explaining the decision for the selected parameter status
        - A final attainment decision is at the discretion of the assessor

To reiterate, predator fish or panfish alone cannot be used to determine that the parameter 'PCBs in Fish Tissue' is fully supported; bottom feeders are required for a full support determination of the parameter. However, if the data exists, the levels of PCBs in predator fish or panfish can be related to attainment as described above, and then appropriately noted and tracked in the KATTS application.

Delisting Requirements

To delist, an effort should be made to match or exceed the data set used in the original assessment, considering species, size class, tissue type, and number of fish. In some cases, newer data that does not meet or exceed the original data set may be used for delisting, and the decision for why this is acceptable will be well documented in the KATTS application.

When individual fish are analyzed:

- If, in the most recent data set, the median is ≤ 0.01 mg/Kg of PCBs, then PCBs in fish tissue will be proposed for delisting

When composites are analyzed:

- If, in the most recent data set, the median of the composite samples is ≤ 0.01 mg/Kg of PCBs, and a majority of the composite samples have a concentration ≤ 0.01 mg/Kg of PCBs, then PCBs in fish tissue will be proposed for delisting

    - It is unlikely that composite samples will be used to delist PCBs in fish tissue, as bottom feeders, which are often large enough to analyze individually, are required for a full support attainment decision

Cautions and Considerations

The updated screening value of 0.01 mg/Kg for PCBs in fish tissue is just above the LOD, which ranges between 0.005 and 0.008 mg/Kg depending on the % moisture and the amount of tissue used in the analysis. But, the updated screening value of 0.01 mg/Kg for PCBs in fish tissue is below the Limit of Quantification (LOQ), and therefore values between the LOD and LOQ will be estimated values. It is possible to have 10 fish that all have estimated values where the median is < 0.01 mg/Kg but is quantified and therefore known to be above 0.002 mg/Kg, the value that translates to the risk level specified in regulation (1×10^{-6}). In these rare circumstances, the assessment coordinator may make the decision to list the waterbody as impaired due to PCBs in Fish Tissue, but is not obligated to do so. Considerations include size of fish, season of catch, and type of fish when making this decision. Such a decision will be well justified and clearly outlined in the KATTS application.

Tissue Analysis: Further Guidance

In recent years, smaller, headwater streams have been sampled for fish where tissue has been analyzed for mercury and PCBs. When this data exists, attainment decisions for the Fish Consumption designated use can be made, under certain circumstances, as outlined below. As more data of this type is collected, this method will be updated and revised as necessary.

Data Requirements

The following data requirements apply:

- Fish Species: Creek Chub (*Semotilus atromaculatus*)
    - If creek chubs are not available, Stonerollers (*Campostoma spp.*) may be used
- Size of Fish:
    - Creek chub – minimum length of 100 mm
    - Stonerollers – minimum length of 80 mm
- A minimum of 10 fish from a stream reach
- A minimum of two five-fish composite samples shall meet the following requirements:
    - All individuals of the same species
    - Similar in size so that the smallest individual in a composite is no less than 75% of the total length of the largest individual
    - Collected at the same time
- Composite samples will be analyzed as whole body samples
- Convert dry weight to wet weight, if necessary

Mercury in Fish Tissue (Headwater Fish - Creek Chubs or Stonerollers)

If the assessment data requirements were met, then attainment is determined as such:

- Full Support: The median of two or more composite samples is ≤ 0.3 mg/Kg of mercury
    - If the biologists were able to catch larger, older fish where the accumulation of mercury is likely, then the indicator 'Mercury in Fish Tissue (HW Fish) <= WQS' should be

associated to the parameter 'Mercury in Fish Tissue' with a parameter status "Full Support"
    - If there is any concern that the data is not representative of the intention of the indicator, then the parameter status "Insufficient" should accompany the parameter 'Mercury in Fish Tissue'
- Nonsupport: The median of two or more composite samples is > 0.3 mg/Kg of mercury
    - The indicator 'Mercury in Fish Tissue (HW Fish) > WQS' should be associated with the parameter 'Mercury in Fish Tissue' with the parameter status "Nonsupport"
    - If there is any concern that the data is not representative of the intention of the indicator, then the parameter status "Insufficient" should accompany the indicator 'Mercury in Fish'
- Additional Considerations
    - If the concentration of some composite samples are > 0.3 mg/Kg, while the concentration of other composite samples are ≤ 0.3 mg/Kg of mercury
        - An attainment decision should not be made and the parameter status "Insufficient" should accompany the parameter 'Mercury in Fish Tissue' and further data collection should take place before making an attainment decision

PCBs in Fish Tissue (Headwater Fish - Creek Chubs or Stonerollers)

If the assessment data requirements were met, then attainment is determined as such:

- Full Support: The median of two or more composite samples is ≤ 0.01 mg/Kg of PCBs
    - If the biologists were able to catch larger, older fish where the accumulation of PCBs is likely, then the indicator 'PCBs in Fish Tissue (HW Fish) <= WQS' should be associated with the parameter 'PCBs in Fish Tissue' with a parameter status of "Full Support"
    - If there is any concern that the data is not representative of the intention of the indicator, then the parameter status "Insufficient" should accompany the parameter 'PCBs in Fish Tissue'
- Nonsupport: The median of two or more composite samples is > 0.01 mg/Kg of PCBs
    - The indicator 'PCBs in Fish Tissue (HW Fish) > WQS' should be associated with the parameter 'PCBs in Fish Tissue' with a parameter status of "Nonsupport"
    - If there is any concern that the data is not representative of the intention of the indicator, then the parameter status "Insufficient" should accompany the parameter 'PCBs in Fish Tissue'
- Additional Considerations
    - If the concentration of some composite samples are > 0.01 mg/Kg of PCBs, while the concentration of other composite samples are ≤ 0.01 mg/Kg of PCBs
        - An attainment decision should not be made and the parameter status "Insufficient" should accompany the parameter 'PCBs in Fish Tissue' and further data collection should take place before making an attainment decision

Case by Case Situations

When mercury is the pollutant of concern, clear guidelines have been documented for predator fish and panfish. When PCBs are the pollutant of concern, clear guidelines have been documented for bottom feeders. However, there may be times when it is appropriate to compare predator and panfish to the

PCB standard, and vice versa, to compare bottom feeders to the mercury standard. Although it's not the group in which accumulation of those pollutants is most common, certain situations, such as a spill, may create a situation where the comparison is appropriate. In these circumstances, it is reasonable to use other organisms beyond those outlined in the above method to track results and inform attainment decisions, acknowledging that the same data requirements for the specific species will still apply. If this comparison is done and used for attainment decisions, then the rationale for doing so will be well documented in the KATTS application.

Water Column Data

All Waterbody Types

Table 1 in Section 6 of 401 KAR 10:031 outlines water quality criteria for Human Health (Fish) that aim to protect human health regarding fish consumption. For those parameters that have a numeric value, a minimum of quarterly samples over a three year period is required such that:

- Full Support
    - No more than 1 excursion in a 3 year time frame
- Partial Support
    - More than 1 excursion in 3 years, but in less than 10 % of samples
- Nonsupport
    - More than 1 excursion in 3 years and in greater than 10 % of samples

While three years of quarterly or more frequent sample collection is preferred, there are exceptions where less than three years of data may be considered. Assessment may occur where multiple samples are collected and a criterion is exceeded by a magnitude of concentration or frequency that supports an impairment decision without three full years of data.

Delisting Requirements

If a waterbody has been listed as impaired for the fish consumption designated use due to a parameter outlined in Table 1 of Section 6 of 401 KAR 10:031, then data requirements to delist the parameter are as follows:

- Minimum of quarterly samples over a three year period where there is no more than one exceedance of the water quality standard for the parameter of concern
- If less than 3 years of data was used to originally list the parameter of concern, then the same number of years of samples can be used to delist the parameter so long as 1) all seasons represented, 2) low and high flow regimes represented in each season, and 3) there is no more than one exceedance of the water quality standard for the parameter of concern during the sampling effort

The assessment coordinator has the final determination of whether the data set is sufficient to warrant a delisting if less than 3 years of data is collected.

Works Cited

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Commonwealth of Kentucky
Energy and Environment Cabinet
Department for Environmental Protection
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Abbreviations, Acronyms and Definitions

ADB: Assessment Data Base- used to manage assessment determinations and associated water body information.

AKGWA: Assembled Kentucky Ground Water- unique identity code for springs.

ATTAINS: Assessment and TMDL Tracking and Implementation System- EPA system for national reporting of assessed water bodies.

BMU: Basin Management Unit- hydrological unit of associated water bodies defined for resource management.

CAH: Cold Water Aquatic Habitat- habitat that is capable of supporting indigenous coldwater aquatic life or self-sustaining or reproducing trout populations year-round.

CALM: Consolidated assessment and listing methodology. This is guidance procedures as it is often referred to for the assessment and listing as required by the Clean Water Act, Sections 303(d) and 305(b).

CAS #: Chemical Abstract Number- unique numeric identification for chemicals assigned by Chemical Abstract Services.

CCR: Consumer Confidence Report- annual compliance report for domestic drinking water finishers; compliance based on federal and state codes that set maximum contaminant levels for various pollutants.

Conventional Pollutant: Pollutants readily treatable by municipal sewage treatment plant. These are: biological oxygen demand; fecal coliform; oil and grease; pH; and total suspended solids. These pollutants part of the broader list of nonpriority pollutants.

CWA: Clean Water Act- established by Congress in 1972, with subsequent amendments, to restore and maintain the chemical, physical and biological integrity of the nation's water bodies.

DBI: Diatom Bioassessment Index- multimetric index used to detect responses to pollutants by the diatom community.

DMR: Discharge Monitoring Report- required reporting of discharged pollutants relative to limits under the NPDES (National Pollutant Discharge Elimination System) program.

DO: Dissolved oxygen – available oxygen in the water column and used by aquatic organisms that breath under water.

DOW: Kentucky Division of Water – agency of the Department for Environmental Protection, Energy and Environment Cabinet.

DEP: Kentucky Department for Environmental Protection, Energy and Environment Cabinet.

DFWR: Kentucky Department of Fish & Wildlife Resources, Tourism, Arts & Heritage Cabinet

DU: Designated Use – appropriate, beneficial uses of the aquatic resources, e.g., streams, lakes and springs, along with water quality standards to manage these resources.

DWS: Domestic Water Supply – water body source used to produce water for human (domestic) consumption.

EDAS: Ecological Data Application System – database used to manage biological, physical and chemical data.

EPA: U.S. Environmental Agency

EPT: Ephemeroptera, Plecoptera, Trichoptera – three orders of aquatic insects that generally are indicative of good water quality.

Evaluated Data: Examples include, data not collected in-stream such as discharge data from a permitted facility like a municipal wastewater treatment plant or observational information. Data not collected under proper SOP or environmental conditions may be evaluated, but not used alone to make a designated use assessment decision that would result in a TMDL.

FSA: U.S. Farm Services Agency

GIS: Geographic Information System – designed to capture, analyze, manage and present spatial or geographical information.

GLI: Great Lakes Initiative- agreement between EPA and Great Lakes states to a plan to restore the health of the Great Lakes.

GNIS: Geographic Names Information System – a database containing names and location information about physical and cultural features in the USA.

Hg-guidance: Guidance for Implementing the January 2001 methylmercury water quality criterion.

HUC: Hydrologic Unit Code – numeric sequence used to identify a river, reach of river or area of drainage.

IR: Integrated Report – comprises the 305(b) report of a state's inventory of aquatic resources and assessed waters and the 303(d) list of impaired water bodies and segments.

KAR: Kentucky Administrative Regulation – regulations that include the Commonwealth's water quality standards.

KIBI: Kentucky Index of Biotic Integrity – multimetric index calibrated to detect changes to the fish community to physical and chemical disturbances.

KORA: Kentucky open records act – act provides for the access to documents that comply with the conditions of the law.

KPDES: Kentucky Pollutant Discharge Elimination System – permitting program authorizing the discharge of pollutants to water bodies; this is the delegated National Pollutant Discharge Elimination System under the CWA Section 402.

MBI: Macroinvertebrate Bioassessment Index – multimetric index calibrated to detect changes to the aquatic insect community to physical and chemical disturbances.

MCL: Maximum Contaminant Level – the level of a contaminant in drinking water below which there is no expected adverse health effects.

MP: Mile Point – used to describe an assessment unit of a stream in the Integrated Report.

Monitored Data: Data collected in-stream or in-lake and appropriate to utilize for making designated use assessment decisions. Data used for initial designated use assessment is preferred not t be older than five years, but older data will be considered on an individual basis. Qualities to consider for older data are type of data (biological or water quality grab samples, including bacteria) that may be considered still relevant and likely to correlate to current environmental conditions.

NHD: National Hydrography Dataset – digital database of surface waters used to make GIS maps. Used in the Integrated Report to geospatially display assessment units and aquatic inventory.

Nonpriority Pollutant: Pollutants not on the priority pollutant list. Examples of those pollutants are ammonia, nutrients, iron, dissolved oxygen, pH and temperature.

ORSANCO: Ohio River Valley Water Sanitation Commission – interstate commission authorized by Congress in 1948 to control and abate pollution in the Ohio

River Valley. The commission comprises the six Ohio River mainstem states and tributary states of New York and Virginia.

OSRW: Outstanding State Resource Water – water bodies and segments afforded the designated use of OSRW based on support of federal threatened or endangered species, water quality and biological qualities, or unique features as provided in water quality standards.

PCBs: Polychlorinated biphenyls – synthetic industrial organic compound. The compound is composed chlorine and a bipheyl (two benzene rings).

PCR: Primary Contact Recreation – recreation where full body contact with the water is expected.

Pollutant: Examples of pollutant are: a solid waste; dredged spoil; sewage; chemical wastes; radioactive materials; temperature; industrial; municipal; and agricultural waste discharged into a water, Clean Water Act (CWA) (Section 502[6]).

Pollution: The definition of pollution under the CWA (Section 502[19]): *The man-made or man-induced alteration of the chemical, physical, biological, and radiological integrity of water.*

Priority Pollutant: List of 126 (currently) pollutants that are organic compounds or that are toxic pollutants (e.g., metals) as defined in Section 307 of the Clean Water Act. See Appendix D for the toxic parameters.

QAPP: Quality Assurance Project Plan – the planning, procedures, quality assurance and control, and project evaluation documentation.

RA: Relative Abundance – numbers of a particular type of organism as a percentage of the total number of organisms.

SCR: Secondary Contact Recreation – recreation where partial body contact with the water, excluding contact with the head, is expected.

SOP: Standard Operating Procedure – document whereby the methods of particular processes are described and expected to be routinely followed.

STORET: Acronym stands for STOrage and RETrieval, this is an EPA Data Warehouse

SU: Standard Unit – a common unit of measurement, e.g., US customary units.

TDS: Total Dissolved Solids – all inorganic and organic substance suspended in a liquid. Examples of TDS are calcium, magnesium, potassium, chloride and phosphates.

TMDL: Total Maximum Daily Load – calculation of the amount *load* of a pollutant that a stream can assimilate daily without exceeding a certain criterion.

TKN: Total Kjeldahl-nitrogen – measure of organic nitrogen and ammonia in water.

TNI: Total Number of Individuals – a metric based on numbers of individuals, e.g., percentage of worms (Oligochaeta).

TP: Total Phosphorus – all forms of phosphorus in a sample (orthophosphate, organic phosphate and condensed phosphates).

TSI: Trophic State Index – the biological condition of a water body, defined by ` biomass, often algal biomass.

TSS: Total Suspended Solids – all suspended solids, determined by weight of solid residue.

TVA: Tennessee Valley Authority – manage one dam project in the Commonwealth.

USACE: United States Army Corps of Engineers – manage 18 dam projects (15 entirely intrastate) in the Commonwealth.

USGS: United States Geological Survey – federal research and resource monitoring agency.

UT: Unnamed Tributary – tributary that has no official name according to GNIS.

WAH: Warm Water Aquatic Habitat – surface water and habitat capable of supporting indigenous warmwater aquatic life.

WQS: Water Quality Standards – define the objectives and goals of a water body by setting designated uses and criteria to protect the uses; also an antidegradation policy to protect existing uses and high quality waters.

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Scope and Applicability

This CALM (Consolidated Listing Methodology) or standard operating procedure (SOP) provides the steps and processes for making designated use (DU) support assessments on water bodies as required by the Clean Water Act (CWA) Section 305(b). This SOP is utilized for streams, large (boatable) rivers, lakes and reservoirs which are assessed utilizing applicable water quality criteria found in the Energy and Environment Cabinet's administrative regulations.

Executive Summary

This CALM describes the procedures for assessing water bodies under Section 305(b) of the CWA. The goal of this document is to provide guidance for those procedures and the resources necessary to carryout the processes for assessment of the designated uses applicable to the Commonwealth's aquatic resources. Additionally, this SOP was written as a general guide to provide background and insight to interested parties within the area of environmental management and planning relative to the Division of Water (DOW) monitoring and assessment programs.

The CALM begins with a background on the DOW's water quality monitoring programs and an overview of the Commonwealth's demographics, those particularly related to aquatic resources. The development of basin-level aquatic resource inventory and classification scheme received considerable attention to detail due to the essential need for precise cataloging of assessments and building the required foundation to present the results required for resources assessed. That is followed by an overview of the application of water quality standards (WQS) for aquatic resources and how use support determinations are made relative to water quality criteria. Addressed are the procedures necessary to assist in assuring data management, sufficiency, credibility and quality. Then assessment procedures are presented based on a DU approach. This approach includes procedures for applying numeric criteria, interpretation and application of narrative criteria in concert with response data and implementing the criteria to make use assessment decisions. Supporting information is found in several appendices and referenced sources.

Personnel Qualifications

The DOW personnel performing assessments must meet their minimum position classification requirement as determined by the Kentucky Personnel Cabinet. In practice, those performing assessments often possess specialized knowledge in the areas of aquatic biology, chemistry, stream, and lake ecology. The use of GIS programs and databases is a necessity in the assessment process. Familiarity in application and implementation of WQS and the regulatory programs involved with the CWA Section 402 are necessary.

Chapter 1. Introduction

The IR is prepared by the DOW, Department for Environmental Protection (DEP), for submittal to the U.S. Environmental Protection Agency (EPA) to fulfill requirements of sections 303(d), 305(b) and 314 of the Federal Water Pollution Control Act of 1972 (P.L. 92-500), as subsequently amended (commonly referred to as the Clean Water Act). Section 305(b) of the Act requires states to assess and report current water quality conditions to EPA every two years.

The DOW has followed the EPA's guidance to incorporate sections 303(d) and 305(b) into an *Integrated Report*. This reporting format provides the framework and methods that contribute to unifying the reporting elements of these two sections of the CWA: Section 305(b) – the elements for water quality assessment and Section 303(d) – the listing of water bodies and (stream) segments that require a Total Maximum Daily Load (TMDL) be calculated for the pollutants contributing to impairment. When released, the IR is in two volumes. Provided in Volume I is an overview of the Commonwealth's water resources, select demographic, physiographic and ecoregional statistics, monitoring and planning, and water quality assessment. Volume II contains the EPA-approved list of those water bodies and segments that are impaired for one or more DU and require a TMDL for the pollutants that exceed WQS. Additional principle components of Volume II are the status for TMDLs under development, future monitoring plans in watersheds associated with impaired water bodies or segments, public notice plans for TMDLs and a list of water bodies and segments under consideration for delisting.

The DOW utilizes the assessment database (ADB) to store water body and segment assessments and to aid in producing the various narrative and statistical tables that are presented in the IR, Volume I. The ADB has been modified to meet the particular needs of DOW. It contains assessment information such as geographic information and unique identification tags used to produce reach index maps to provide an atlas of assessed water bodies and segments.

The DOW operates its primary monitoring programs under a five-year rotating watershed management approach implemented in 1998 (Figure 1-1). The major basins that comprise the five basin management units (BMU) are listed below and illustrated in Figure 1-2:

- Kentucky River BMU;
- Salt River and Licking River BMU
- Upper Cumberland River and 4-Rivers BMU;
- Green River – Tradewater River BMU; and
- Big Sandy River – Little Sandy River and Tygarts Creek BMU.

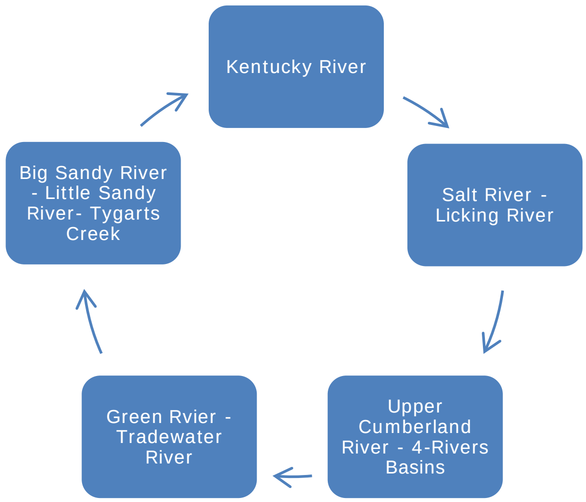

Figure 1-1. Rotation sequence for basin management units.

Each one of these BMUs contains minor tributaries to the Ohio River, with the exception of that portion of west Kentucky that drains directly to the Mississippi River. Monitoring of the Ohio River mainstem is accomplished by the Ohio River Valley Water Sanitation Commission (ORSANCO) and the assessments of the river are reported in their 305(b) report; that report may be found at http://www.orsanco.org/ under the title Biennial Assessment of the Ohio River. As each member state is an active participant of the ORSANCO programs that carryout its mission of managing the water quality in the Ohio River, the monitoring and assessment of DUs on the Ohio River are deferred to ORSANCO. Where ORSANCO's assessment methodologies differ from the DOW's, the DOW methodology takes precedent. The assessment procedures for ORSANCO are located in the aforementioned biennial report. The segments not supporting any assessed DU and require a TMDL are subsequently listed in Volume II of the Kentucky IR.

Reporting Frequency

Each 305(b) cycle is produced biennially and most typically the focus of each report is on two BMUs. In addition to the written IR published each biennium, an electronic-only update is usually submitted to EPA in each intervening year; this electronic update is included in the biennial report. For example, the 2011 electronic update was part of the 2012 305(b) cycle.

Public Participation

The public, including other agencies and nongovernmental organizations, are provided opportunities to participate in data submission and review of the draft 303(d) list of waters that do not meet one or more designated uses according to data results. On an ongoing basis, outside data may be submitted for consideration in making assessment decisions. Those data are subject to evaluation of application on the same level of rigor applied to

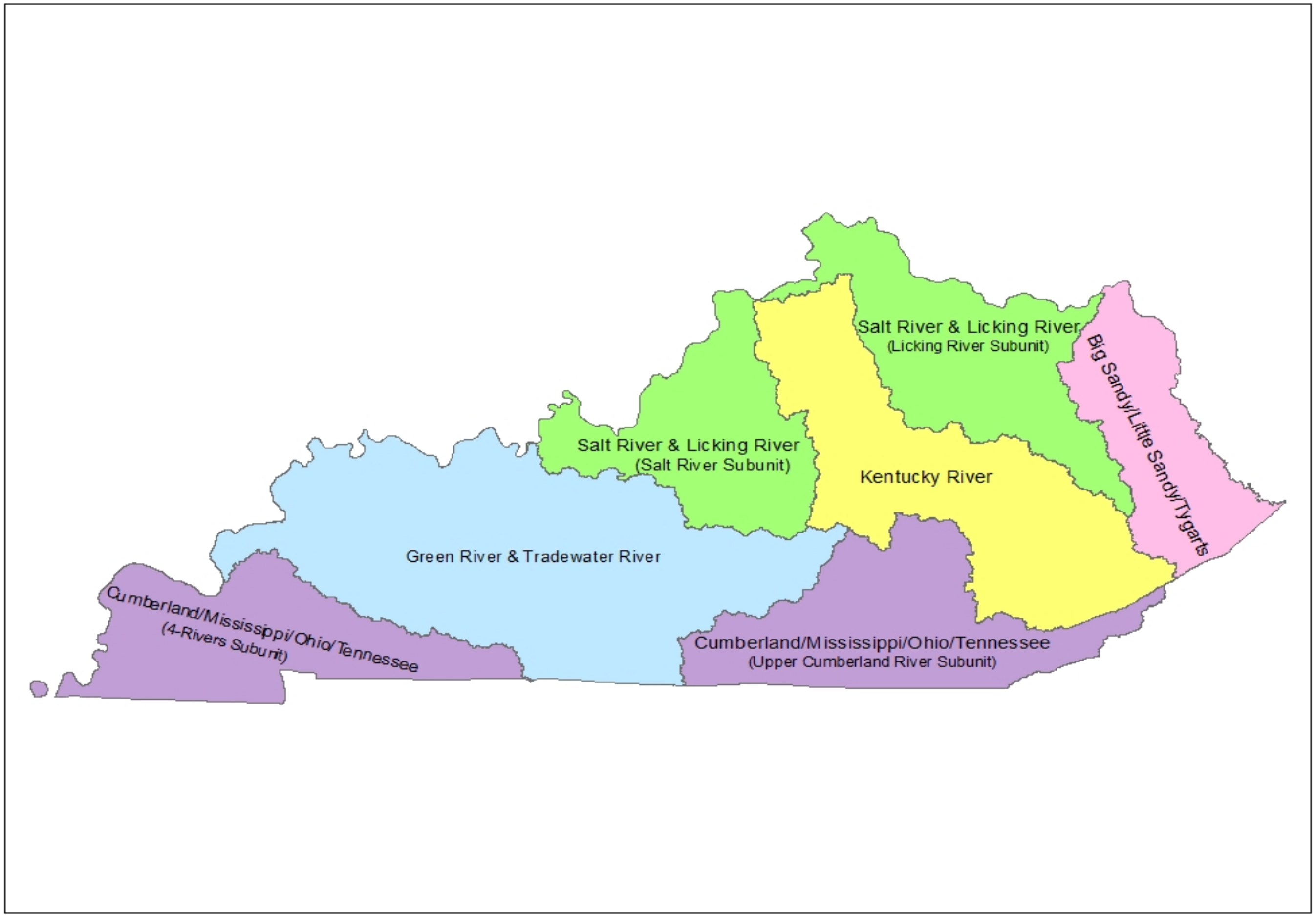

Figure 1-2. Kentucky basin management units (BMU).

the DOW. The agency's SOPs and monitoring guidance can be accessed at: http://water.ky.gov/Pages/QualityAssurance.aspx where links can be followed to specific topics and resources. However, data that may not meet minimum QA requirements can be considered for review, providing screening results for directing internal, public or other agency monitoring with the goal of generating data that can be used for assessment decisions.

Once the 303(d) list of waters that require a TMDL is drafted, the list goes out for public review and comment on the DOW webpage. A notice is posted on the DOW webpage (http://water.ky.gov/Pages/default.aspx) under the *News & Events* dropdown tab. The public review and comment period runs 60 days as required by Kentucky statute (KRS Chapter 224.70-150, http://www.lrc.ky.gov/Statutes/chapter.aspx?id=38337).

1.1 Water Resources and Select Demographics of Kentucky

The IR Volume I contains background information and basic water resource and demographic statistics in order to give context for all resources and accurately report statistical information derived from water quality assessment. This information is then applied by the appropriate geographic area or unit. An overview of the Commonwealth's demographic and physiographic statistics is contained in Table 1-1.

Table 1-1. Atlas of Kentucky's water resources and profile of select demographic and physiographic statistics atlas of Kentucky

State population, 2012[1]	4,380,415
Surface area (square miles)	40,409
Number of counties	120
Number of major physiographic regions	5
Number of level III ecoregions	7
Number of level IV ecoregions	25
Number of major basins	12
Number of USGS[2] 8-digit HUC[3]	42
Number of stream miles (1:24,000 NHD[4])	90,962
Number of stream-formed border miles (Big Sandy River, Tug Fork, Mississippi River and Ohio River)	983
Number of publicly owned lake and reservoir surface acres (estimated)	229,500
Three largest reservoirs by surface acres	
Kentucky Lake (Kentucky portion)	57,103
Cumberland Lake	47,623
Barkley Lake (Kentucky portion)	42,780
Wetland acres (approximation)[5]	324,000

[1]US Census Bureau
[2]United States Geological Survey
[3]Hydrolgic unit code
[4]National hydrography dataset
[5]*The state of Kentucky's environment: 1994 status report*. The Kentucky Environmental Commission, 1995.

1.2 Overview: Water Quality Standards

Kentucky WQS are part of the Kentucky Administrative Regulations. Current copies of the water quality regulations are found on the Legislature's Kentucky Administrative Regulations Titles webpage (http://www.lrc.state.ky.us/kar/titles.htm). The regulations pertinent to water quality for assessment are found in the Title 401 Energy and Environment Cabinet, Department for Environmental Protection, Chapter 10 (http://www.lrc.ky.gov/kar/TITLE401.HTM). These criteria form the underpinning to determine if water quality conditions are adequate for support of the applicable beneficial DUs as they apply to water bodies.

1.2.1 Designated Uses

All water bodies in Kentucky have assigned certain DUs for the management and goal of attaining a minimum level of water quality. DUs are promulgated in 401 KAR 10:026 and the implementing (enabling) criteria are in 401 KAR 10:031. The following are applicable DUs:

- warm water aquatic habitat (WAH)
- cold water aquatic habitat (CAH)
- primary contact recreation (PCR)
- secondary contact recreation (SCR)
- domestic water supply (DWS)
- outstanding state resource water (OSRW)

With the exception of CAH and OSRW, the remaining DUs apply by default to all water bodies. OSRW is a state-defined DU for water bodies that support federally listed threatened or endangered aquatic species or may support an excellent biological community (e.g., waters that are in the exceptional/reference reach categories in 401 KAR 10:030). Below is a description of each DU.

Cold Water Aquatic Habitat
As defined in 401 KAR 10:001, CAH is designated for water bodies that support a self-sustaining or reproducing trout population on an annual basis. All water bodies that support the CAH are listed in regulation (401 KAR 10:026). There are implementing criteria specific to CAHs; however, where there are no specific criteria to CAH, those criteria promulgated for WAH apply.

Warm Water Aquatic Habitat
WAH applies to the majority of water bodies in the Commonwealth – those not designated as CAH. The applicable definition of WAH is aquatic habitat capable of supporting indigenous warmwater life.

Primary Contact Recreation
PCR is the DU for water bodies in the Commonwealth with the implementing criteria to manage water quality for the protection of human health against primarily pathogenic-induced gastrointestinal illnesses during the recreation season of May 1 through October 31.

The bacterium *Escherichia coli* (*E. coli*) is a commonly used indicator organism to monitor water quality for safe swimming conditions. *E. coli* are bacteria found in the guts of warm-blooded organisms, including humans. The presence of *E. coli* indicate there is likely waste from warm-blooded organisms present in the water body and with it the expectation of various pathogenic viruses, parasites and pathogenic strains of bacteria, including *E. coli*. A criterion for pH applies to this DU during the recreation season. This criterion provides protection to the bather from extremes of both acidic and basic conditions.

Secondary Contact Recreation
SCR is the DU for water bodies in the Commonwealth with the implementing criteria to manage water quality for the protection of human health against primarily pathogenic gastrointestinal illnesses and maintain a safe range for pH; these criteria apply to this DU year-round. Fecal coliforms are bacteria found in the guts of warm-blooded organisms and are the indicator used to monitor the water quality for safe boating and wading, or any form of recreation that does not include full-body immersion. The pH criterion protects against extremes of water quality with regard to acidic and basic conditions. Additional criteria exist to protect the beneficial DU from such conditions including nuisance algal blooms and nuisance aquatic macrophytes that may result from eutrophication and floating scum.

Domestic Water Supply
This DU applies to all waters in the Commonwealth; however, the enabling criteria that implement this DU are only applied at the point of withdrawal. The human health criteria that apply are found in 401 KAR 10:031 (Section 6). These criteria were developed to protect water quality for human consumption.

Outstanding State Resource Water
This DU provides additional measures for maintenance of habitat quality, including water quality, for the protection of federally threatened or endangered species that inhabit the OSRW. Additionally, select water bodies that have water quality and habitat that support a diverse fish or macroinvertebrate community and rate *excellent* on either the fish or macroinvertebrate biological community multimetric index (http://water.ky.gov/Pages/SurfaceWaterSOP.aspx) may be proposed for designation as an OSRW. Other qualities or attributes that qualify a water body for OSRW designation are found in WQS, 401 KAR 10:031 Section 8 (http://www.lrc.ky.gov/kar/401/010/031.htm). In addition to the listing of special waters in regulation, a webpage was created to facilitate access to all special waters (http://eppcapp.ky.gov/spwaters/); this webpage is organized into 12 river basins and by designation. However, final authority for determination of whether a water body has a special DU or category is through WQS procedures that encompass a formal promulgation of any given water body with an exception, certain OSRWs. Waters that are determined to support a federal threatened or endangered species are typically afforded OSRW protection through enabling language found in 401 KAR 10:031 Section 8(1)(a)3. Both designated and candidate OSRW are published on the DOW's webpage at: http://eppcapp.ky.gov/spwaters/, so this is often the most up-to-date source of OSRW listings that include candidate water bodies or segments.

1.2.1.1 Fish Consumption

The quality of fish flesh needed for human consumption is a desired goal set forth in WQS. While fish consumption is not a DU it is strongly implied in WQS, particularly 401 KAR 10:031 Sections 2 and 6. As such, the U.S. EPA agrees and requires the assessment results of fish tissue residue monitoring be reported in Section 305(b) of the CWA under the fish consumption use.

1.3 Overview of the Monitoring Programs and Principle Data Types Generated

The DOW has the primary responsibility of monitoring and assessing the Commonwealth's water resources and regulating the permitting of facilities and industries that discharge via point sources to waters of the Commonwealth. Given the DUs established for Kentucky's waters provide a management framework for water bodies, there are necessary monitoring programs essential for recognizing the effectiveness of CWA programs such as Section 402, KPDES (Kentucky Pollutant Discharge Elimination System) and Section 401, Water Quality Certification. The monitoring programs aid in the identification of other sources of pollutants such as non-point sources that may be addressed through other CWA programs, for example Section 319. The DOW has a number of monitoring programs designed to determine the condition of water quality statewide for DU assessment and reporting. Those programs generate in-stream monitored biological and water quality data based on various indicators. Table 1.3-1 highlights the monitoring programs and those indicators commonly integrated into each program.

Biological Indices

The DOW's biological monitoring program has a long history in aquatic resource monitoring used to determine the health and long-term water quality of stream and river resources. Biological monitoring was implemented in the 1970s with significant refinement of the program as more research led to the development of biological multimetric indices (for more information visit http://water.ky.gov/Pages/SurfaceWaterSOP.aspx). The development of these metrics and associated criteria resulted in a regional reference reach approach with the identification of bioregions. Two of the three indices are used as primary tools to make assessment decisions for aquatic life use in headwater and wadeable streams; however, the algae index is only used in a supplemental role for assessment determination. Additionally, these multimetric indices are an integral component for the interpretation of aquatic life narrative criteria in WQS, 401 KAR 10:031 Section 4 (http://www.lrc.ky.gov/kar/401/010/031.htm).

Macroinvertebrates

Macroinvertebrates have been used extensively in water quality monitoring and impact assessment since the early 1900s. Today, macroinvertebrates are used throughout the world in water quality assessment as environmental indicators of biological integrity to describe water quality conditions or health of the aquatic ecosystem and to identify causes (pollutants) of impairment. This indicator community is relatively sedentary, spending a significant portion of their life cycle in the aquatic environment. Various populations of a

Table 1.3-1. Water body resources and monitoring programs.

	Long-term ambient Surface Water[a]	Rotating Surface Water[a]	Targeted Biological Monitoring[b, c]	Reference Reach[b]	Probabilistic Bio-survey[d]	Lake Monitoring[e]	Ground-water & Springs Monitoring[a]
Wadeable Streams (1st-5th order)		X	X	X	X		
Large (boatable) Rivers	X	X	X				
Lakes/Reservoirs						X	
Groundwater							X
Swamps/Wetlands[f]	--	--	--	--	--	--	--

[a]Indicators: chemical (priority and nonpriority pollutants) and bacteria.
[b]Indicators: macroinvertebrates, fish, algae, chemical (nonpriority pollutants), habitat.
[c]Includes some wadeable streams over 250 mi^2 where wadeable and associated with ambient water quality stations.
[d]Indicators: macroinvertebrates, chemical (nonpriority pollutants), habitat.
[e]Indicators: chemical (nonpriority pollutants), fish kills, macrophytes, algae.
[f]Monitoring methodology under development.

community are dependent on multiple habitats for support of the different consumer levels throughout the food web (herbivores, omnivores, and carnivores) and, significantly, many sensitive taxa live in or on the sediments of streams (benthos); sediments may be a sink for environmental contaminants. These characteristics and habits make this a key indicator group of their environment.

The Kentucky Macroinvertebrate Bioassessment Index (MBI) was developed using the reference reach approach across the different ecoregions of the Commonwealth. The index scaling was set to differentiate between reference (those least impacted headwater and wadeable streams) conditions and increasing gradients of watershed disturbance. Development of the individual indices that respond to observed and measured physical and chemical impacts across the Commonwealth resulted in the recognition of three bioregions. Each bioregion is defined by watershed physical, chemical and hydrological characteristics that support communities of aquatic insects adapted to those characteristics and qualities particular to a bioregion.

Fishes

The evaluation of fish community structure is an important component of biological monitoring providing a reliable assessment. The Kentucky Index of Biotic Integrity (KIBI) was developed based on reference conditions, tolerances, and community feeding structure of the species present. Note that in terms of the KIBI, headwater streams are defined as less than 6-mi^2 and wadeable streams are those streams 6-mi^2 or greater, up to about 200 mi^2 (DOW 2003). A transition zone exists between 6 and 10 mi^2 for classifying some streams as either headwater or wadeable streams. Familiarity with the bioregions and best professional judgment is necessary to determine the correct classification of streams within this zone.

Advantages of using fish as biological indicators include their widespread distribution, utilization of a variety of trophic levels, stable populations during summer months, and the availability of extensive life history information (Karr et al. 1986).

Algae

Algae (primarily diatoms) communities are important water quality indicators, particularly as it relates to trophic status (nutrient or organic enrichment) and toxic conditions. This indicator group is critical to the food web of streams, beginning the process of primary production through photosynthesis. The Diatom Biotic Index (DBI) may be used in conjunction with macroinvertebrate or fish multimetric indices to add greater resolution to the information considered when assessing the biological integrity of headwater and wadeable streams. The DBI is not used to make independent assessment determinations, requiring further calibration of the indices for independent applicability.

1.3.1 DOW Monitoring Programs

1.3.1.1 Ambient Program

The primary objectives of the ambient monitoring program are to establish current conditions and long-term records and trends for water quality, biological health, and fish tissue residue in the state's major watersheds. Sub-objectives are identified as determining: 1) the quality of water in OSRWs; 2) background or baseline water quality conditions in streams not impacted by discharges; 3) the extent to which point and non-point sources affect trophic state of lakes and reservoirs; and 4) the water quality of major inflow tributaries to lakes and reservoirs.

There are 72 primary water quality stations throughout the Commonwealth that are monitored on a monthly or bimonthly frequency. Primary water quality stations are monitored monthly during a given BMU water-year (one year out of five), and those stations outside of the current water-year BMU are monitored bimonthly. These stations are located at mid- and lower watershed reaches of United States Geological Survey (USGS) 8-digit Hydrologic Unit Code (HUC) basins. Station locations also occur near the inflow and outflow of major reservoirs, for example Green River Reservoir in the Green River basin. Rotating watershed stations are monitored for the same suite of water quality parameters as the primary stations, but are established to provide monitored data in smaller watersheds for a variety of reasons, such as: 1) TMDL development; 2) characterizing and monitoring reference watersheds; 3) monitoring waters that receive permitted discharge (for instance from a municipal wastewater treatment plant) to characterize upstream and downstream water quality; and 4) characterizing water quality conditions in certain intense use landscapes, such as urban, agricultural or resource extraction (mine) areas.

1.3.1.2 Reference Reach Program

In the 1970s the DOW had biosurvey programs based on qualitative evaluation of the community composition. With time, greater understanding of the ecology of aquatic systems opened the door to development of multimetric indices. Development of such aquatic indices became an area of emphasis for aquatic resource agencies at the federal, state and local levels as an improved management tool with national and regional approaches. These approaches incorporate standardized, technically sound methods appropriate to the prevailing physiographic and ecoregional conditions.

The DOW-refined multimetric indices were developed based on a regional reference approach. There are three of them, the MBI, the KIBI and the DBI. Data led to the combining of similar Level IV Ecoregions that had common community structure and responses to gradients of perturbations; these combined ecoregions form bioregions. Four bioregions resulted from the development of the MBI and six for the KIBI. These waters do not represent pristine conditions (i.e., they contain anthropogenic and natural gradients of disturbance) rather they represent what is believed to be the best examples of high quality water and biological integrity in each of the four (or six) identified bioregions. Through this effort a network of streams, or stream reaches that represent reference biological conditions, have been identified throughout the Commonwealth. These stream reaches are listed in WQS, 401 KAR 10:030. One to three biological communities (macroinvertebrates, fishes, or algae) are sampled per biosurvey. When only one community is used to make an aquatic life use support determination, either macroinvertebrates or fishes are monitored, typically the former.

1.3.1.3 Probabilistic Survey

A biosurvey utilizing probabilistic or randomly located sample sites in headwater and wadeable streams was initiated with the assistance of EPA's technical support group in Corvallis, Oregon. Kentucky's approach is to sample macroinvertebrates once at 50 sites in each BMU per five-year cycle. In 2004 nutrients and additional chemical water quality variables were added to the suite of indicators within this program. These additional data aid in the development of numeric nutrient criteria, provide a more comprehensive knowledge of what ambient water quality variable concentrations are in each BMU, and increase the confidence of each aquatic life use assessment. This program allows DOW to report on aquatic life use support in headwater and wadeable streams on a BMU and statewide scale over the five-year watershed cycle. Section 305(b) use support determinations using probabilistic biosurvey program data are made only on segments directly monitored; however, the DOW extrapolates use support for each BMU providing current and historic use support trends, detection of changes in condition of aquatic resources over time and a means to gage general effectiveness of various pollution control programs and projects. This program is important both on the statewide level as well as national level, as indicated by EPA's nationwide probabilistic monitoring efforts in wadeable streams, lakes and reservoirs, large rivers and survey of wetlands.

1.3.1.4 Lake and Reservoir Monitoring Program

The lake and reservoir monitoring program began in the early 1980s as part of the CWA Section 314 Clean Lakes Program. Currently DOW monitors nearly all significant publicly owned lakes and reservoirs in the state (approximately 105 water bodies). Many of the USACE reservoirs and Kentucky Lake, a Tennessee Valley Authority (TVA) project, are monitored by those respective agencies in partnership with DOW, meeting each agency's data requirements.

Chemical (nonpriority pollutants) water quality variables and chlorophyll *a* are analyzed to determine current trophic state status of each of these lakes and reservoirs. Monitoring occurs three times during the growing season, spring (April – June), summer (July – September) and fall (October – November) to capture the seasonal variability; an overall Trophic State Index (TSI) score is calculated from the combined seasonal data. By monitoring these resources every five years trends in water quality can be measured; the TSI trend information is a reporting element of Section 305(b). This program collects data sufficient to determine aquatic life and secondary contact recreation DU support status. The majority of these resources have use restrictions that are listed in the annual *Kentucky Fishing & Boating Guide* published by the Kentucky Department of Fish and Wildlife Resources (DFWR). Recreational swimming is not allowed in most reservoirs managed or owned by the DFWR. Only in those reservoirs with a designated swimming area and with an on-duty qualified lifeguard is swimming allowed. Given the nearly all inclusive swimming restrictions, PCR is not assessed for in nearly all DFWR-owned or managed reservoirs.

Chapter 2. Reporting Framework and Initial Procedures for Assessment

An assessment unit is a length (e.g., stream or spring run) or area (e.g., springs, lakes and reservoirs) of a water body assessed for DU support. Before considering the primary objective of DU assessment, considerable background information of the hydrologic management framework, basic hydrologic scale for reporting considerations and the many sources of metadata that are required to establish assessment units is necessary. Without attention to detail of these hydrologic units of scale, the procedures for establishing assessment units and multiple sources for obtaining and deriving the metadata necessary for data management and support, the reporting of the plethora of information would be nearly impossible. Cross-platform communication for integration from assessment unit data and storage, to reporting and translation of the results into narrative, tabular and geographical indexing and mapping, are all dependent on the supporting metadata.

2.1 The Hydrological Framework for Monitoring and Assessment

All river miles and water bodies are cataloged by the USGS into hydrologic units, which are numeric codes of varying length representing drainage basins or watersheds. This system does not follow political boundaries since aquatic systems do not necessarily begin or end with those boundaries. However, for readily achievable management goals, to support the regulatory structure, and for reporting purposes, it is necessary to define the miles of streams and acres of water bodies in each of these hydrologic units within state boundaries. Also, it is of benefit to have a common system of cataloging hydrologic features that follows the same rules and procedures throughout the country. This system provides a context for water quality data applications and reporting that forms a basis for use on differing scales as needed that are not only applicable on local and state scales, but on regional and national scales.

This cataloging system first divides large basins, for example the Atlantic or Gulf of Mexico, into more exclusive drainage basins. This system of hydrologic divisions was adopted as reporting units for national assessment by the EPA. The hydrologic units are presented as hydrologic unit codes (HUC), with a cataloging system progression that becomes more exclusive of aquatic resources, and by extension to geography; different sized HUCs are denoted by the number of digits; the larger the number of digits, the smaller the drainage basin they represent. For larger level management and state 305(b) reporting purposes, the DOW uses the 6- or 8-digit HUC; however, for more localized application, the use of 11-, 12- or 14-Digit HUCs may be necessary.

In addition to being the size used for 305(b) purposes, the 8-digit HUC has also been used for planning and implementation of regional monitoring programs and reporting of those results. For example, the probabilistic biological monitoring program and the ambient water quality network design use the framework provided by the 8-digit HUC scale. It is at the 8-digit HUC level that significant divisions occur in large watersheds. For instance the Kentucky River basin consists of five HUC, the three river forks (North, Middle and South) constitute the upper basin, mid-basin of the mainstem and the lower basin of the mainstem each represented by 8-digit HUC that comprise the principle tributary systems of the basin. Using a scale that goes to the 8-digit HUC resolution, the following are elements of that accounting system (e.g., 05130101); Figure 2.1-1 represents an example of a particular HUC.

- The first two digits are known as a hydrologic region.
- The aggregation of the first four digits represents a hydrologic subregion.
- Two more digits result in a 6-digit HUC, an aggregation of watersheds known as hydrologic accounting units.
- An 8-digit HUC is referred to as a cataloging unit.

It is necessary in preparing Section 305(b) of the IR that the political boundaries of the state are reflected in the resultant analyses, while bearing in mind water quality is not constrained by those boundaries. Table 1, Appendix A, segregates the HUC by BMU and reports the total stream miles per HUC; where a HUC is shared with another state, only the stream miles in Kentucky are reported.

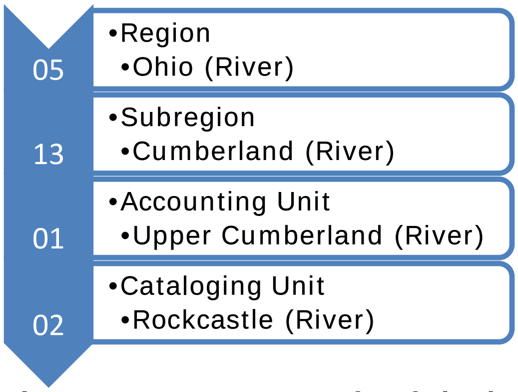

Figure 2.1-1. An example of the hydrological units accounting system developed by the U.S. Geological Survey. An 8 digit hydrologic unit code (HUC) is shown by accounting unit hierarchy.

2.2 Procedures for Procuring and Generating the Assessment Metadata: Unit Identification, Georeferencing, Tracking and Assessment Categorization

Each water body or segment (assessment unit) assessed becomes one individual record. It is essential to tag each assessment unit for ready identification, georeferencing (mapping), tracking (historic information and data), reporting and retrieval of the elements particular to an assessment unit.

A list of resources to aid in populating assessment forms for waters that have previously been monitored can be located at the below locations. For water bodies that have not been assessed, information on obtaining the needed information follows in Section 2.2.1.

- GIS layers of assessed water bodies and segments: http://gis.gapsky.org/watershed/;
- STORET database for water quality data (primarily chemical): http://www.epa.gov/storet/;
- Kentucky IRs: http://water.ky.gov/waterquality/Pages/IntegratedReport.aspx; and
- Kentucky Health Portal (under the water maps portal): http://watermaps.ky.gov.

Currently, biological data are warehoused in a non-web accessible database. Request for data of that type should come through a KORA (Kentucky Open Records Act) request made at: http://eec.ky.gov/Pages/OpenRecords.aspx.

2.2.1 Procedures and Information Sources to Populate the Assessment Form

The DU support decisions are documented for each assessment unit on an Assessment Form. Assessment forms are maintained on a DOW common drive under the folder entitled "Assessment Form_Master", accessible at: W:\ProgrammaticData\Clean_water_act\305b and an example is located in Appendix A. The assessment form follows and is presented in sections by topical relevance. Stepwise, from top of the page to completion are the information fields for each assessment unit and the procedures to complete them.

305(b) Assessment Form
(Complete a form for each assessed segment)

Sample Year: _________
305(b) Cycle Year (DOW only): ________
Basin Management Unit: ______________________________
Stream or Reservoir Name: ____

- The "Sample Year" is that year the samples were collected; if samples were collected over a period of years note the most recent year.
- The "305(b) Cycle Year" field will always be an even-year (fields with *(DOW only)* are those completed by the 305(b) Coordinator).
- The *Basin Management Unit* is one of five defined hydrologic management units (Figure 1-2).
- The *Stream or Reservoir Name* field should contain the official USGS geographic name. These are found on the 1:24,000 scale topographic maps. However, for those streams that were not named when the topographic maps were published there may be a recent official name given; the Geographic Names Information System (GNIS) is a database where official names are stored and is accessible at: http://geonames.usgs.gov/domestic/index.html. The National Hydrography Dataset (NHD) will often be a more convenient means to access the GNIS water body name; the NHD Layer is accessed via Geographic Information System (GIS) software. The Kentucky Geospatial server is the state repository for GIS data, including the NHD (national hydrography dataset), http://kygisserver.ky.gov/geoportal/catalog/main/home.page.
    - The following are the procedures employed as a means to identify streams without an official name.
        - If the stream discharges directly to a named stream (e.g., Stone Creek), then the unnamed tributary (UT) would follow this naming convention: UT of Stone Creek. When determining the stream length, the measure tool in GIS (ArcMap) should be used to follow the NHD flowline (or 1:24K USGS blue line (including intermittent) if no NHD flowline [blue] line exist) and the total stream length reported in miles to the nearest 0.1 mile (if the measurement is at 0.05 mile, or close (±0.01 mi), report to the nearest 0.05 mile). If the UT forks, by convention the fork that is greatest in length is followed upstream to its endpoint (blue [including intermittent] line); this constitutes the UT.
    - The mile point where the UT discharges into the receiving stream is attached to the UT name to facilitate the identification of the UT, for example UT of Stone Creek-1.5.

- The same procedures apply to an UT of UT of Stone Creek. In this example, the UT of UT of Stone Creek is identified by mile points that go from the named receiving stream to the mile points of the mouths of intervening UT(s), ultimately to the stream mile point receiving direct discharge from the UT of interest. This example is written as UT of UT of Stone Creek-1.5-0.8
- For reservoirs and lakes, naming procedures similar to those for streams apply. If no name occurs on the USGS 1:24,000 quadrangle, consult the NHD Lakes Layer; another resource is the GNIS (http://geonames.usgs.gov/domestic/index.html) database. If there is no official name then one should provide a description similar to UT convention for streams. For example, if the dam is at mile point 25 on the major tributary, name it Unnamed Reservoir (or Lake, as appropriate) (UR/L) of Brown River-25.0.
- For springs please access the same references as mentioned for streams and lakes to acquire the name. If a name does not exist, please use the convention for streams and reservoirs. For example, Unknown Spring (US) of Lubber Creek-10.5.

The next section of the assessment form ties the naming protocols into an alphanumeric identity that is necessary to both track and identify segments. The first entry of this section is determined by using information from the two entries that follow it. The "ADB ID #" is so placed to be in a prominent location.

ADB ID # (DOW only)**:** KY____

GNIS ID: _ _ _ _ _ _ **Segment #** (DOW only): _ _ **Stream Length (miles) (w/ in KY):** ______.___
(exclude reservoir miles)
Lake/Reservoir Area (acres):___________

- As stated, current GNIS IDs may be found at: http://geonames.usgs.gov/domestic/index.html. Another often more convenient means to access the GNIS ID is through the NHD via GIS. The prefix "KY" is added to all GNIS numbers.
  - For Springs, please use the AKGWA (Assembled Kentucky Ground Water) number for the ID. This number can be found on the DOW Springs Layer in ArcGIS.
- Segment number relates to a unique assessment segment for a given water body.
  - For streams, the downstream-most segment begins with Segment #01.
  - Lakes, reservoirs and springs (unless it is the outlet "run" from the spring being assessed, then it follows the convention for streams) are given a Segment #00.
- The segment number should be attached to the ADB ID # as follows: XXXXXX_01.
  - For an UT, the GNIS number of the receiving stream is utilized, followed by the mile point where the UT discharges.

- For the example UT of Stone Creek, it would have assigned a GNIS number and segment number that when combined would read XXXXX-1.5_01.

- "Stream Length" is that length of stream found on the NHD at a 1:24,000 scale (all subsequent stream miles and water body acreage refers to that obtained from the NHD river mile datalayer at 1:24,000 scale). Use the length of the entire stream, not the length of the assessed segment, unless they are identical. The length of UTs must be manually determined by the measuring tool in GIS. Any portion of stream that has been hydrologically altered by creating a pond or reservoir via dams affects the stream length.
  - Subtract the distance inundated by the reservoir from the total stream length. Note the subtracted distance below the stream length entered. For mouth of streams discharging to a large river that shows backwater extending into the mouth of the stream, deduct that distance as well. The USGS topographic 1:24,000 scale and the "Named Lakes" datalayer are the preferred standards, used to determine the extent of reservoir backwater. The FSA digital orthographic imagery (1-m scale) may be helpful in certain cases where the standard datalayers present questionable or incomplete information.
    - All stream assessments exclude the lake or reservoir portion of a stream, including backwater extending upstream.
- Populate the reservoir or lake acres for publically accessible ponds, reservoirs and lakes with information established in ADB.
  - For newly created lakes or reservoirs the acreage is determined based on the reported normal pool elevation obtained through the DFWR.

The next section of the assessment form identifies the stream location, length (reach), the corresponding coordinates to NHD stream miles, sample location(s), major river basin and the USGS cataloging unit (8-digit HUC in this case), and dates associated with the assessment.

USES Assessed (tick all that apply)**:** Aquatic Life (20WAH) ____ (20CAH) ____; Fish Consumption (21) ____;

Primary Contact Rec. (42) ____; Secondary Contact Rec. (44) ____; Drinking Water (50) ____; OSRW (316)

Receiving Water: ____

Assessment Reach: **Downstream/Upstream MP:** ___.__ **to** ___.__ **Segment Length:** ____.__

Downstream Lat. (dd.ddddd): ____._____ **Long.** (dd.ddddd): **-** ____.____

Upstream **Lat.** (dd.ddddd): ____._________ **Long.** dd.ddddd): **-**____._________

Downstream/Upstream Description: ______________________________ to _______________________________

Sample Site Mile Point: _____.____ **Lat.** (dd.ddddd): ____.__________ **Long.** (dd.ddddd): **-**____.__________

Topographic Map Name (1:24K) (sample location): ____

Major Basin (circle one)**:** Big Sandy; Little Sandy; Tygarts; Licking; Salt; Green; Tradewater; Upper Cumberland; Lower Cumberland; Kentucky; Mississippi; Ohio; Tennessee

USGS (8-digit) Cataloging Unit: ______________________ **County(s)** (sample site)**:** ______________________

Station ID: ______________________ **Sampling Date:** Start: ____-____-____; End: ____-____-____ (mm-dd-yy)

Assessment Date (DOW use only)**:** ____-____-____ (mm-dd-yy) **Data Type:** Monitored or Evaluated (circle)

- Tick all DU that will be (or carryover from previous assessment) assessed for a water body or segment.
- Identify the receiving water body of the stream, lake or reservoir.
- The sample site information should be entered and this information will typically be provided by the person that did the field work and made the preliminary assessment.
- Once an assessment reach or segment is determined enter that information in the appropriate fields.
- Record all coordinates in decimal degrees to five decimal places.
    - These coordinates will come from GIS via the NHD mile point layer; that layer should be zoomed to a scale of 1:4,000 or greater resolution when determining the coordinates.
- The downstream and upstream description delineates the segment's upper and lower boundaries by geographic reference. These will typically be at the mouths of tributary streams, backwaters, headwaters, city limit, break in buffer zone integrity, etc.
- Note the USGS 1:24,000 topographic quadrangle name(s) of the sample location(s).
- Identify the major river basin.
- Enter the USGS 8-digit HUC.
- Enter the county or counties, sample location only.
- The Station ID refers to either that assigned for EDAS, EPA STORET or another identifier used to associate data with a sample location.
- The sampling date applies to the data used to make the current assessment.
    - Often for segments with historic data those dates will be noted below this line for reference purposes.
- The assessment date is for the final assessment for the segment or water body, completed by the 305(b) coordinator.
- Identify whether the data are monitored (in-stream data) or evaluated (e.g., Discharge Monitoring Reports (DMRs) from the KPDES program or monitored data older than five years).
    - Exercise caution when using *evaluated* data; recognize the associated limitations such as low confidence in the data or if the data are generally old enough (>5 years) to raise questions about their current relevance.

The next section relates to assessment of the aquatic life (warm water or cold water) DU. This DU assessment may be made with chemical, biological and habitat data; however, habitat results are used only as supplemental information, for example identification of pollutants affecting the biological community such as sedimentation/siltation and/or the lack of functional in-stream habitat types.

Community Score: MBI ____.__; KIBI _____.__; DBI _____.__ **Number of sites:** __________

Biological Integrity (circle one)**:** Excellent Good Fair Poor

Trophic State Index: _____; (circle one): Oligotrophic; Mesotrophic; Eutrophic; Hyper-eutrophic: **Trend** (circle one): ↑ ↓ ↔

Aquatic Life (AL) Use Support Table (tick all that apply)

Aquatic Life	**Full**	**Partial**	**Non-support**	**Full but Threatened**	**Level of Info 1 - 4**
Habitat					
Biological					
Chemical					
Toxicity					

USE Support, AL (DOW only)**:** Full Partial Support Non-support Full but Threatened

Assessment Codes: ____

Cause Code: ________ **Source Code(s):** ____
Cause Code: ________ **Source Code(s):** ____
Cause Code: ________ **Source Code(s):** ____
Cause Code: ________ **Source Code(s):** ____
Cause Code: ________ **Source Code(s):** ____
(*Note: At least one Source Code must be assigned to each Cause Code*) Kentucky Division of Water – 09-18-2008

- If biological community data are available and used in the assessment, record the score(s) appropriate to the multimetric index.
- The number of sample locations of a segment should be recorded, commensurate with Station ID's.
- Based on the score of the index or indices, report the overall biological integrity.
- The TSI (trophic state index) should be calculated and reported for lakes and reservoirs, along with the general trend of the water body TSI.
- In the Aquatic life use support table, tick all rows that are applicable.
  - Partial support and Full but Threatened carries the same programmatic weight as non-support (i.e., both require a TMDL).
- The "Level of Info 1-4" column relates to the rigor of the data associated with temporal, spatial, frequency and types of data (e.g., toxic, non-toxic or toxic + non-toxic parameters).
  - This information is found in *Guidelines for Preparation of the Comprehensive State Water Quality Assessments (305(b) Reports) and Electronic Updates (1997)*, Section 3.2 and may be accessed at http://water.epa.gov/type/watersheds/monitoring/guidelines.cfm and Consolidated Assessment and Listing Methodology-Toward a Compendium of Best Practices (http://water.epa.gov/type/watersheds/monitoring/calm.cfm) and synthesized in Tables 1 – 3, Appendix B along with code definitions in Table 1, Appendix C. While updates have occurred since the 1997 guidance

specific to the IR format, important information used in the assessment and reporting procedures are relevant in this guidance.

- Circle the overall DU support determination.
- All assessment codes related to the level of information are found at http://water.epa.gov/type/watersheds/monitoring/guidelines.cfm under *Supplement (Volume 2, Section 1)* and in Tables 1 – 3, Appendix B and Table 1, Appendix C.
- The cause (pollutant) should be identified when relevant. These have corresponding numeric codes located in Table 1, Appendix D.
- The source code relates the pollutant to suspected or known sources of the pollutant. This list is modified by grouping sources into categories to increase efficiency, see Table 2, Appendix D.

The following section of the form provides for reporting the assessment of fish consumption and the remaining DU. This is accomplished in a similar fashion as the aquatic life use by associating causes with suspected sources. Fish consumption, primary and secondary contact recreation DU and drinking water DU are based on human health criteria in WQS.

Fish Consumption (21)

USE Support: Full Partial Support Non-support Full but Threatened (circle one)

Assessment Codes: ____

Cause Code: _______ **Source Code(s):** ___________________________________
Cause Code: _______ **Source Code(s):** ___________________________________
Cause Code: _______ **Source Code(s):** ___________________________________

Primary Contact Recreation (swimming) **(42)**

USE Support: Full Partial Support Non-support Full but Threatened (circle one)

Assessment Codes: ____

Cause Code: _______ **Source Code(s):** ___________________________________
Cause Code: _______ **Source Code(s):** ___________________________________

Secondary Contact Recreation (44)

USE Support: Full Partial Support Non-support Full but Threatened (circle one)

Assessment Codes: ____

Cause Code: _______ **Source Code(s):** ___________________________________

Drinking Water (50)

USE Support: Full Partial Support Non-support Full but Threatened (circle one)

Assessment Codes: ____

Cause Code: _______ **Source Code(s):** ___________________________________
Cause Code: _______ **Source Code(s):** ___________________________________

The next section is the listing and assessment table where each segment or water body is categorized by DU and the support or non-support of WQS for each.

Assessment Category (DOW use only)

Category	Definition	Uses (circle all that apply)
1	All designated uses for water body Fully Supporting.	20WAH 20CAH 21 42 44 50 OSRW
2	Assessed designated use(s) is/are Fully Supporting, but not all designated uses assessed.	20WAH 20CAH 21 42 44 50 OSRW
2B	Segment currently supporting use(s), but 303(d) listed & proposed to EPA for delisting.	20WAH 20CAH 21 42 44 50 OSRW
2C	Segment with an EPA approved or established TMDL for the following use(s) now attaining Full Support. TMDL approval #__________________.	20WAH 20CAH 21 42 44 50 OSRW
3	Designated use(s) has/have not been assessed (insufficient data).	20WAH 20CAH 21 42 44 50 OSRW
4A	Segment with an EPA approved or established TMDL for the following listed use(s) not attaining Full Support. TMDL approval #_______________	20WAH 20CAH 21 42 44 50 OSRW
4B	Non-support segment with an approved alternative pollution control plan (e.g., BMP) stringent enough to meet full support level of all uses within a specified time.	20WAH 20CAH 21 42 44 50 OSRW
4C	Segment is not meeting Full Support of assessed use(s), but this is not attributable to a pollutant or combination of pollutants.	20WAH 20CAH 21 42 44 50 OSRW
5	TMDL is required.	20WAH 20CAH 21 42 44 50 OSRW
5B	Segment does not support designated uses based on evaluated data, but based on KY listing methodology, insufficient data are available to make a listing determination. No TMDL needed	20WAH 20CAH 21 42 44 50 OSRW

- Each assessed DU of a water body or segment is categorized using the appropriate Assessment Category; categories 1 and 2 are self-explanatory.
- Category 3 is only used where data exist for an assessment unit, but are insufficient for assessment.
- Categories 2B, 2C (state-defined categories) and 4A water bodies and segments require an EPA-approved TMDL with an associated unique TMDL identification number from EPA's ATTAINS (Assessment and TMDL Tracking and Implementation System) database before the associated DU can be assigned to it.
- Category 4B has specific, restrictive requirements that must be met: specifically this category requires an EPA-approved plan in-lieu of TMDL development.
- Category 4C is uncommonly used given the requirement for populating it with a water body or segment that is not supporting a DU due to natural conditions or pollution (excludes pollutants, see Category 5 below). A straightforward example might be a stream where WAH is not supported due to *flow alteration* that has resulted in water diverted from the natural channel to a created canal. Listing a DU in this category may require still greater scrutiny including ecological, physical or chemical information to rule out impairment is a result of a known pollutant. An example might be a stream segment below a dam. Chemical data does not indicate a reported water quality parameter that exceeds water quality standards, and any habitat perturbations are result of physical alterations such as stream flow, sinuosity and bedrock due to scouring below the dam. The biological community scores a less than *good* (meets expectations); examination of the community structure is

indicative of a filtering community rather than a diverse collector-gatherer community that would naturally occur given unregulated flow (no dam) conditions. Here, flow alterations, lack of diverse substrate and niches and a shift from heterotrophic ecology to autotrophic ecology are the causes of the result. In this scenario, removal of the dam or modifications to dam management and habitat restoration is what may restore the natural community.

- Category 5 is for a segment or water body that is not supporting one or more DU based on a pollutant and requires development of a TMDL.
- Category 5B is a state-established category to accommodate those water bodies and segments where in-stream data is not known to exist, but DMR data indicate one or more pollutants are not meeting permit requirements at a magnitude and frequency that reasonably indicates in-stream DU is not being met. An actual example is a package treatment plant discharge that greatly exceeds the limit for *E. coli* by an order of magnitude on some ongoing frequency. This may result in PCR use assigned to this category. This often highlights facilities that need immediate inspection and could result in the collection of in-stream data. Segments in this category do not require a TMDL.

Assessment Information Source: (circle/insert all that apply)

DOW	DOW	University	Federal	State	Other
Amb. WQ	Reservoir	EKU	ACE	DFWR	ORSANCO
Amb. Bio.	GDW	Morehead SU	EPA	KGS	MSD
WBM	NPS	Murray SU	TVA	SNPC	LFUCG
Bac-t	Fish Tissue	UK	USFS	TN	Volunteer
IS	PWS	UL	USF&WS	VA	
RR	DMR	WKU	USGS	WV	
FO	TMDL				
ProbMon					

The above table on the assessment sheet is for data source tracking. All contributors of data used to make an assessment decision should be identified.

Once the assessment form is filled out, any physiochemical sampling data used to make assessment decisions should be submitted as a data table on a separate piece of paper and electronically provided to the 305(b) coordinator. Include the following:

- The name or identification number of sampling station(s).
- The physiochemical data, including the dates the samples were taken, as well as data qualifiers and flags.
- Explanations of any flags or data qualifiers.
- Make notation if pH was measured in the laboratory rather than in-situ.
- Specify non-detections and the corresponding detection limit (e.g., ‘Non-detect at 0.1 mg/L’ or ‘< 0.1 mg/L’).
- Highlight any sampling result that exceeds an applicable water quality criterion.
- Explain all highlights in a footnote to the data table; if acute or chronic criteria apply specify which were exceeded.

- Compute the percentage of samples exceeding applicable water quality criteria, and note the percentage in a footnote to the table.

Chapter 3. Data Requirements and Assessment of Designated Uses for Section 305(b) Reporting

This chapter addresses the consideration of data sources, a necessary level of data quality and rigor, data sufficiency and the data types applicable for the various DU assessed. Table 3-1 provides a synoptic view of the DU and the core indicators that are used to determine use support. These topics and procedures lead to application of WQS to monitored data for DU assessment.

3.1 Data Sources

The DOW monitors and collects the majority of data used to develop the 305(b) and 303(d) lists. In addition to the overview of water resource monitoring programs provided in Section 1.3, the DOW accepts data from a number of local, university, state and federal partners. The following are external sources of data, with the particular BMU of focus for assessment driving the likelihood of a given local partner providing data. Other data sources are considered as they become available. Data without proper quality assurance is typically used for screening purposes.

- Kentucky Department for Fish & Wildlife Resources
- Kentucky Department for Natural Resources
- Kentucky Geological Survey
- Kentucky State Nature Preserves Commission
- Lexington-Fayette Urban County Government
- Louisville Metropolitan Sewer District
- Northern Kentucky Sanitation District #1
- Ohio River Valley Sanitation Commission (ORSANCO)
- U.S. Army Corps of Engineers
- U.S. Environmental Protection Agency
- U.S. Fish & Wildlife Service
- U.S. Forest Service
- U.S. Geological Survey
- Universities: Eastern Kentucky, Kentucky, Louisville, Morehead State, Murray State and Western Kentucky

Table 3-1. Designated uses of Kentucky waters and the indicators used to assess designated use support.

Use	Aquatic Life	Primary or Secondary Contact Recreation	Fish Consumption[a]	Drinking Water[b]
Core Indicators	*Stream:* 1-2 biological communities: macroinvertebrates, and fishes[c] Dissolved oxygen Temperature pH Specific conductivity/TDS Chemical Parameters (i.e., priority and nonpriority) Sedimentation *Lake/Reservoir:* Dissolved oxygen Temperature pH Specific conductivity/TDS Parameters (nonpriority) Fish kills	*Stream:* Pathogen indicators: fecal coliform; *E. coli* pH *Lakes/Reservoir:* Pathogen indicators: fecal coliform or *E. coli* pH	Methylmercury Mercury PCBs Phenol Other fish consumption chemicals of concern found in water quality standards	Inorganic chemicals Organic chemicals Pathogen indicators: fecal coliform; *E. coli*
Supplemental Indicators	*Streams:* Diatom Flow *Lake/Reservoir:* Trophic State Index (TSI) Secchi depth Nuisance macrophytes Nuisance macroscopic algal growth Nuisance algal blooms	Nuisance macrophytes Nuisance macroscopic algal growth Nuisance algal blooms Suspended sediment (TSS) Odor Human toxic or behavioral response Debris Unnatural oil slick	N/A	Odor Taste Treatment problems caused by poor water quality

[a]Implied designated use per 401 KAR 10:031 Sections 2 and 6.
[b]All core indicators are based on "at the tap" Consumer Confidence Report received from the domestic water supplier.
[c]Biological communities are utilized in headwater and wadeable streams; assessment of boatable streams most often rely on chemical indicators only.

3.2 Data Sufficiency, Credibility and Quality

Data quality is of paramount importance for making 305(b) and 303(d) listing decisions. This is due to the fact that an incorrect data assessment may result in a listing error of a water body or segment. Should a water body not be listed as not supporting when that is the case, there are consequences to that decision just as there are when assessing a water body as not supporting its uses when it is. In the case of incorrectly assessing a non-supporting DU as supporting, this action may lead to potential human health risks and ecological impairment that go unaddressed, or be delayed. Likewise, incorrectly assessing a supporting DU may result in increased costs to regulated entities, communities and individual landowners.

The DOW's data are collected under Division-approved SOPs (http://water.ky.gov/Pages/SurfaceWaterSOP.aspx) applicable to the water quality parameters and biological communities per test or study. Quality assurance project plans (QAPP) are developed defining the minimum data quality and sufficiency. Data from sources outside of the DOW must be collected under the DOW's SOP or a particular agency's SOP that at least meet the minimum quality assurance and control requirements to the applicable DOW SOP. Volunteer data may be used by the DOW for assessment purposes, but those data must be collected under SOP that is at least equivalent to the applicable DOW SOP and a DOW-approved QAPP. Volunteer data not meeting quality objectives may be used for screening purposes.

Because of the complexity of making DU assessment determinations, a minimum level of rigor for data quality is necessary to provide reasonable assurance that the correct assessment decision has been reached. Figure 3.2-1 illustrates data sources, the assembly of data types by DU applicability and a decision point to assure data are of sufficient rigor to make a 305(b) assessment. These steps help to ensure that scientifically valid and informed conclusions are reached and provide a level of rigor and consistent processes that provide for legal defense of the final results. As science advances and WQS are updated, these changes can affect future assessments made on water bodies previously assessed under earlier water quality criteria. For example, conditions may change between the time of the assessment and the monitoring for TMDL development occurs; in such a circumstance the resource could now support the DU. If this occurs, just cause for delisting the 303(d) listed water body can be presented to EPA during the IR submission.

Information is presented in Tables 1 – 3, Appendix B to help determine whether sufficient data exist to make an assessment. The data hierarchies (U.S. EPA 2002, 1997) should be followed when determining the sufficiency of data and the appropriateness of their use. The Level of Information considers factors such as spatial/temporal coverage, data types and technical components.

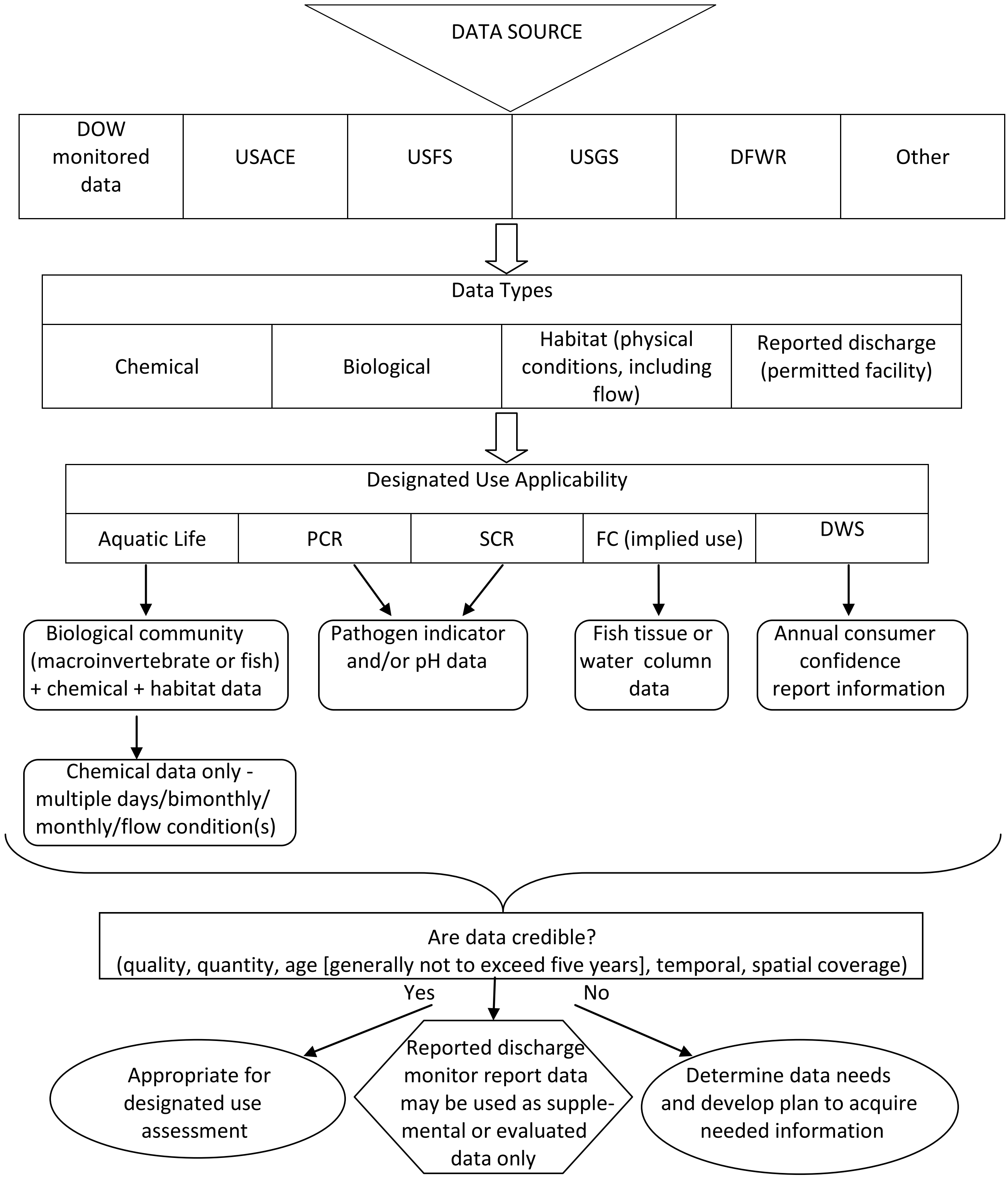

Figure 3.2-1. Sufficient and credible data determination procedures.

3.3 General Assessment Elements and Aquatic Life Use Assessment

Biological Information

Assessment of WAH or CAH is collectively termed aquatic life use. WQS provide criteria for the maintenance of the health and function of aquatic habitats. For a biosurvey investigation where only macroinvertebrates were collected, headwater streams are those that drain less than 5-mi^2; however, the cutoff for headwater streams for fishes is less than 6-mi^2. The MBI calibration defined wadeable streams as those draining 5-mi^2 (6-mi^2 considering fishes) or more, up-to approximately 250-mi^2 in drainage area (for fish use of the KIBI in catchment areas in the extreme range of its recommended use [>200 to 300 mi^2] must be done so with caution (DOW 2003). All watershed areas as previously defined may be adjusted slightly for individual watersheds where there is sound best professional judgment basis.

Large non-wadeable streams, or those generally greater than 250-mi^2, are assessed under different procedures and presented in the next subsection (C*hemical Information*). Assessment decisions involving headwater and wadeable aquatic life use attainment are primarily made using biological data obtained from monitoring programs within the DOW and agencies that meet data required rigor (e.g., USFS, USACE and USGS). Collection and especially taxonomic determination of biological communities requires considerable applied training or academic background with experience. Data analysis is then completed to assess whether the community composition represents a healthy environment. Also interpretation of additional information discerned from the functional structure of that community (i.e., the relationships between habitat disturbance gradient, pollutants and community composition and function) often provide insights by comparing the community present to the expected community for the water body type under evaluation. There are numbers of reasons biological data are important in making level-of-support decisions for aquatic life use. Biological communities (indicators) integrate conditions of their environment and thus serve as good long-term indicators of the environment (physical, chemical and habitat) they live in. The indicators for biology-based assessments are outlined in Table 3.3-1. The two indices used to make bioassessment support determination are incorporated into WQS by reference in 401 KAR 10:030 (http://www.lrc.ky.gov/kar/401/010/030.htm). Level of use support is dependent on the indicator community health and integrity as related directly to each multimetric index score narrative, along with chemical data and supplemental habitat evaluation information.

The DOW has enhanced its WQS through classifying uses of water bodies for aquatic life uses via tiering. Biological data can determine whether the CAH or WAH aquatic life use is met, and also determine the quality and system integrity of water bodies based on the results of biological community integrity. The biological multimetric indices, along with WQS developed to provide protection for qualities of aquatic resources in the Commonwealth, provide a strong program to not only assess level of use support, but to recognize and protect those water bodies and segments that exceed water quality conditions required to support the default uses. This is accomplished through categorization of Exceptional Water in the Antidegradation Policy adopted in WQS, 401 KAR 10:030 (http://www.lrc.ky.gov/kar/401/010/030.htm). Additionally, the aquatic life DU, OSRW, has specific water quality criteria to enhance protection of those water bodies with high water quality and biological integrity (401 KAR 10:031).

Table 3.3-1. Biological criteria for assessment of cold or warm water aquatic habitat (headwater and wadeable streams) use support.[a]

Indicator	Fully Supporting	Partial Support	Non-support
Algae[b]	Diatom Bioassessment Index (DBI) Classification of excellent or good; biomass similar to reference/control.	DBI classification of fair; increased biomass (if nutrient enriched) of filamentous green algae.	DBI classification of poor; biomass very low (toxicity), or high (organic enrichment).
Macroinvertebrates	Macroinvertebrate Bioassessment Index (MBI) excellent or good, high EPT, sensitive species present.	MBI classification of fair, EPT lower than expected in relation to available habitat, reduction in relative abundance of sensitive taxa. Some alterations of functional groups (shift to mostly generalists) evident.	MBI classification of poor; EPT low, total number of individuals of tolerant taxa very high. Most functional groups missing from community.
Fishes	Kentucky Index of Biotic Integrity (KIBI) excellent or good; presence of uncommon, endangered or species of special concern.	KIBI fair. For example, reduction of native species, reduced darter, madtom and sculpin diversity and increased tolerant species.	KIBI poor, very poor, or no fish. Dominant community of tolerant individuals, loss of intolerant species

[a]Acronyms used in this table: EPT= Ephemeroptera, Plecoptera, Trichoptera; RA= relative abundance; TNI- total number of individuals.
[b]Indicator used in a supplemental capacity with fish or macroinvertebrate data; it is not used alone to make final use assessment decisions.

Chemical Information

The physical and chemical criteria adopted by the DOW into WQS are found in 401 KAR 10:031 (http://www.lrc.ky.gov/kar/TITLE401.HTM). These criteria are used to assist in the identification of pollutants that, when exceeded, may negatively affect biological communities. In addition to the aquatic biocommunity indices, the core and supplemental chemical indicators are found in Table 3-1. These criteria may be used to assess aquatic life use alone as long as a sufficient number of samples are collected and the data are applied only to the spatial extent the monitoring rigor allows. Assessments have been made utilizing chemical data since the enactment of the CWA. In the early period, development of biological community quality and integrity indices had not occurred and the significant challenge of the time was controlling and abating chemical pollutant discharges to the aquatic environment. Currently, while biological multimetric indices are available for headwater and wadeable streams, chemical data are the primary tool to assess water quality in large rivers, often called boatable streams, in addition to manmade lakes and reservoirs. Chemical criteria encompass two classes of chemical parameters, priority and nonpriority pollutants. Examples of toxic pollutants (subset of priority pollutants) are mercury, methylmercury, benzene and DDT; a comprehensive list is available at: (http://www.ecfr.gov/cgi-bin/text-idx?c=ecfr&SID=bd1b7f7d8f632c20259961d792e72b2e&rgn=div5&view=text&node=40:30.0.1.1.23&idno=40). Examples of nonpriority pollutants are pH, dissolved oxygen (DO) (low concentration), specific conductivity and temperature. The supporting documentation for national recommended chemical criteria are found at http://water.epa.gov/scitech/swguidance/standards/criteria/current/index.cfm and applicable criteria to Kentucky's aquatic habitats are located in 401 KAR 10:031 (http://www.lrc.ky.gov/kar/401/010/031.htm).

When biological community data are collected, at a minimum, in-situ nonpriority pollutant data are obtained with a multiparameter meter using EPA-approved sensor measurement methodologies (temperature, DO, percent DO saturation, pH, specific conductivity). In nearly all cases the DOW collects and has analyzed nutrients (nitrite + nitrate, ammonia, TKN, TP, total organic carbon) along with total suspended solids, chlorine, sulfate and alkalinity. Together, biological and chemical data provide a robust dataset for assessment.

Nonpriority pollutants and a suite of many priority pollutants are collected for analyses at the DOW's ambient water quality stations. The priority pollutants include metals at those ambient stations. Water quality parameter data are collected with the necessary frequency to assess aquatic life use support for nonpriority and priority (including toxic criteria) pollutants. Assessment methods for the applicable DU follow in Section 3.3.1.

3.3.1 Assessment Elements and Procedures

Assessment decisions are made with as many suitable data types as available; however, the majority of water bodies monitored and assessed for the first time have only one dataset consisting of biological community information coupled with one-time chemical grab samples and in-situ multi-parameter (DO, pH, specific conductivity and temperature) probe data for nonpriority water quality parameters. It is biological community data that provide the substantial rigor and evidence needed to make level-of-support decisions using datasets with limited collection frequency. Adhering to Section 3.2 is critical in minimizing data error and thus reaching sound conclusions in decision making.

Once data are quality assured, the data must be categorized as either *monitored* or *evaluated*. The DOW prefers to make DU support decisions using in-stream data. Additionally, data (i.e., chemical data and biological data [the biological data may still be useful given those data represent an integration of biological, chemical and physical habitat conditions]) older than five years should generally not be used to make a use support decision (U.S. EPA 1997), unless it can be determined the data are still representative of current conditions. The greatest source of evaluated data is generated via the use of KPDES Discharge Monitoring Reports (DMR). The facilities where evaluated data are typically obtained through DMR are small dischargers, those that discharge up to 50,000 gallons per day; these facilities tend to have more frequent permit exceedences as opposed to larger dischargers. The majority of discharges from those systems occur in small watersheds with a 7Q10 (the lowest 7-day average flow that occurs on average once every 10 years) low-flow of zero. The age of DMR datasets utilized are no more than five years old when making the provisional non-support decisions. The DOW created the 305(b) Assessment

Category 5B to use with data of this type. The extrapolation of the DMR data to make an assessment may trigger follow-up inspection of the facilities. It would be inappropriate to use evaluated data to make a full support decision given the data are discharge results only.

Multimetric biological index results provide a tested, reliable foundation from which to make assessment decisions. Chemical data alone generally require more datasets to meet the minimum Level of Information (rigor) that include the frequency and temporal components necessary to detect exceedence of criteria and meet guidance for chemical-based use support decisions. Below are general examples of both data types that meet the level of rigor discussed:

- results from a biosurvey of one to two biological communities (fish or macroinvertebrates);
- a nonpriority pollutant standard that is exceeded once in conjunction with biological community score that has a narrative rating of fair, poor or very poor;
- nonpriority pollutant parameters monitored at least during key periods (e.g., spring or summer) or sampling over a period of months; or
- priority pollutant, provided monitored data are sufficient to capture the needed frequency, duration and magnitude.

The following section provides specific guidance necessary to assign Level of Information ratings with water body system type codes (Tables 1 – 3, Appendix B) to datasets when making concluding use-support assessment decisions.

3.3.2 Substantial and Reliable Data: Required Minimum Level of Information and Assessment

Once the data sufficiency and credibility are established, the monitored data rigor will meet an Information Level found in Tables 1 – 3 of Appendix B with a numeric interpretation of the narrative ranging from one to four, four being the greatest level of rigor. Each table contains three components for consideration when making the Level of Information decision for a dataset. These are: 1) technical components; 2) spatial/temporal coverage; and 3) data quality.

For illustrative purposes, most program data generated or obtained by the DOW for biological and habitat-based (Table 1 and 2, Appendix B) assessment is at Level of Information equaling three; however, some datasets reach a Level of Information of four (Table 1 and 2, Appendix B). Generally, habitat evaluations generated by the DOW equal a Level of Information of three.

Biological monitoring programs in the DOW typically include one-time grab samples of chemical data, this results in a Level of Information of two (Table 3, Appendix B); whereas, ambient monitored data produced through the Primary Stations network result in a Level of Information equaling three (Table 3, Appendix B). For third-party data a QAPP is important for the determination of the appropriate Level of Information the data represent. A decision tree is provided for assessments both with and without biological community data (Figure 3.3.2-1).

<u>Biology (Headwater and Wadeable Streams)</u>
The qualities required to achieve one of the four levels of information when making aquatic life use assessment decisions is found in Table 1, Appendix B. Use of at least one community, either macroinvertebrates or fishes, is required for synoptic (general overview) and probabilistic monitoring bioassessment. For assessment based on one monitored biological community the DOW utilizes a professional biologist, and thus the Level of Information is three when one community is collected. Often a Level of Information of four is obtained as the DOW generally collects both fishes and macroinvertebrates. Table 3-1 provides an overview of the primary and secondary indicators that are used in aquatic life use support assessment.

<u>Chemical</u>
Along with biological community data, the DOW includes chemical data as a monitoring component in all headwater and wadeable stream programs for aquatic life use assessment. Streams that are considered boatable or non-wadable may routinely have only chemical data. The minimum dataset for headwater and wadeable streams normally collected include temperature, pH, DO, percent DO saturation and specific conductivity. In addition, the DOW often collects a more comprehensive dataset that includes TP, nitrite + nitrate, TKN, ammonia, TSS, sulfate, chlorine, alkalinity and hardness.

When assessing DU support and nonpriority chemical data only comprise the dataset, the Level of Information should reach at least two. The minimum Level of Information needed

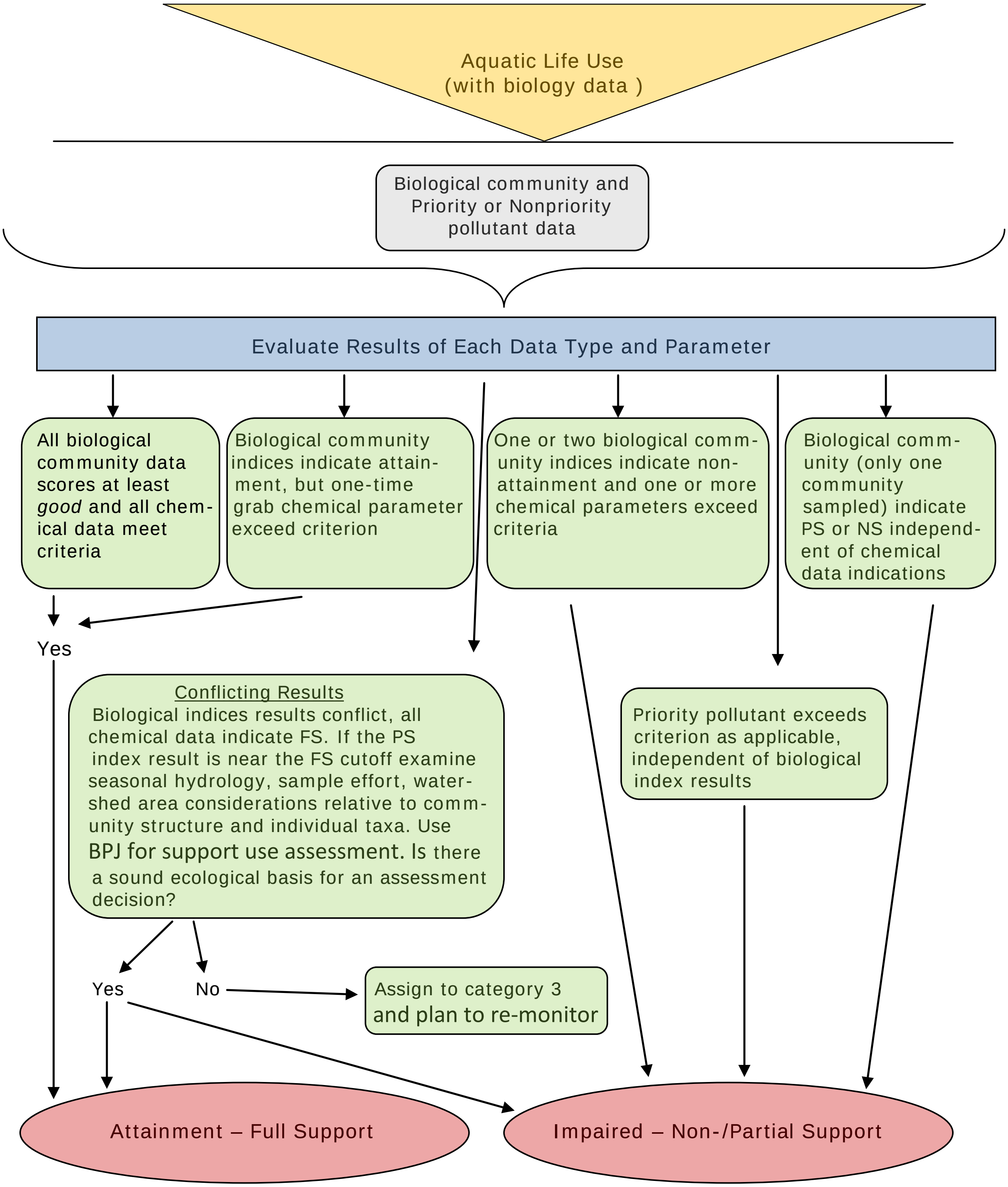

Figure 3.3.2-1. Decision tree for determination of assessment of the aquatic life designated use for monitored lotic waters.

for assessment of toxic pollutants must reach at least Level of Information three (Table 3, Appendix B).

Numeric Criteria

Nonpriority and Priority (i.e., the nontoxic parameters) pollutants are assessed by the DOW incorporating EPA guidance (U.S. EPA 2002, 1997). Water quality data are compared to criteria contained in Kentucky Water Quality Regulations (401 KAR 10:031). The segment fully supports WAH use when a pollutant criterion (e.g., dissolved oxygen, temperature and pH) is not met in 10 percent or less of the samples collected. Impaired, partially supporting, if any one criterion for these parameters is not met in greater than 10 – 25 percent of the samples. A segment is impaired, not supporting, if any one criterion is not met in greater than 25 percent of the samples (Table 3.3.2-1). Pollutants other than toxic criteria require at a minimum multiple samples collected during a month, bimonthly or quarterly for assessment. Appendix B, Table 3 offers guidance on decision making when considering assessment; the DOW requires a minimum of Level of Information of 2 be met in the absence of confirming biological data.

Table 3.3.2-1. Nonpriority and priority pollutants (excluding toxic pollutants) criteria assessment.

Level of Support	Fully Supporting	Impaired	
		Partially Supporting	Non-supporting
Percent of samples exceeded	≤10 %	>10 – 25 %	>25 %

Priority (i.e., the toxic parameters) pollutants are assessed by the DOW incorporating EPA guidance (U.S. EPA 2002, 1997). The DOW requires a minimum Level of Information of three be met to assess toxic parameters, per guidance (Appendix B, Table 3). For a list of the toxic subset of priority pollutants, please see Appendix D, Table 1. Generally, a minimum of quarterly samples over a three year period is needed to have sufficient frequency to pick up acute events.

Aquatic life is considered protected if acute and chronic criteria are not exceeded more than once every three years. A water body segment where an acute criterion is exceeded more than once within a three year period with at least quarterly sampling will be assessed not meeting the CAH or WAH DU (Appendix B, Table 3). It is impaired, partially supporting, if any one criterion is not met more than once but in 10 percent or less of the samples. The segment is impaired, not supporting, if criteria are exceeded in greater than 10 percent of the samples (Table 3.3.2-2).

Results are compared to chronic criteria using three years of bimonthly or more frequently collected data. Observations that equaled chronic criteria are not considered to exceed WQS. The segment is fully supporting CAH or WAH use if criteria are exceeded in no more than one sample over a three year period. Impaired, partially supporting if any criterion is not met in greater than one sample, but in 10 percent or less of samples. The segment is impaired, not supporting if any criterion is exceeded in greater than 10 percent of samples (Table 3.3.2-2). The assessment criteria were closely linked to the way state and federal water quality criteria were developed.

Table 3.3.2-2. Toxic pollutant criteria assessment.

	Fully Supporting	Impaired	
		Partially Supporting	Non-supporting
Number of Exceedences	No more than 1 in 3 years	More than 1 in 3 years, but less than 10 % of samples	More than 1 in 3 years and greater than 10 % of samples

While three years of quarterly or more frequent sample collections are preferred for toxic criteria assessment decisions, there are exceptions where less than three years of data may be considered. Assessment may occur in instances of overwhelming evidence of toxicity concerns where multiple samples are collected and a criterion is exceeded by a magnitude of concentration or frequency of excursions that indicate a toxic condition; thus, supporting a reliable impairment decision.

Narrative Criteria

While most water quality criteria in standards are numeric, there are certain standards based on narrative criteria (narrative criteria are implemented as are numeric criteria – both defined to be protective of the applicable DU). This includes nutrients, conductivity and minimum general criteria applicable to all surface water to protect the aesthetic and recreational qualities, and beneficial uses in general. Assessments are made in the following manner to protect against a (cultural) eutrophication problem.

The narrative **nutrient criterion**, 401 KAR 10:031 Section 1:

> *Nutrients shall not be elevated in a surface water to a level that results in a eutrophication problem.*

The guiding interpretation of the nutrient criterion is found in the definitions chapter of WQS, 401 KAR 10:001 Section 1(30):

> *"Eutrophication" means the enrichment of a surface water with nutrients nitrogen and phosphorus resulting in adverse effects on water chemistry and the indigenous aquatic community. Resulting adverse effects on water chemistry manifest by daily dissolved oxygen supersaturation followed by low dissolved oxygen concentrations and diurnal increase in pH. Resulting adverse effects on the indigenous aquatic community include:*
>
> *(a) Nuisance algae blooms;*
>
> *(b) Proliferation of nuisance aquatic plants;*
>
> *(c) Displacement of diverse fish or macroinvertabrate community by species tolerant of nutrient-enriched environments; or*
>
> *(d) Fish kills brought on by severe, sudden episodes of plant nutrient enrichment.*

A vital part of monitoring is that field personnel document all conditions that may be associated either with or potential degradation of the water body when collecting physical, chemical or biological data. This information is useful when interpreting data for application of narrative criteria. Algae blooms that negatively affect the aquatic habitat include potentially toxic blue-green blooms and macroalgae growth that smother benthic or physically obscure water column habitat. Proliferation of nuisance aquatic plants can have similar effects on the aquatic habitat, affecting spawning, displacing resident biota and the indigenous community structure. This proliferation of excessive algae and plant growth creates stressful environmental conditions. Some examples of excessive conditions that may result in nuisance conditions include the physical area of benthic algae coverage, sestonic algae creating obvious turbid conditions, floating algae, harmful algae blooms or macrophyte rafts.

Two important water quality response variables to nutrient stress (e.g., nitrogen and phosphorus) are DO and pH. These response variables are important data components when interpreting the nutrient criterion. DO concentrations that are unstable, having large swings involving supersaturation and concentrations falling below about 4.5 mg/L in a 24-hour period, coupled with increased pH, are indications of excess nutrient concentrations, persistence of such conditions may lead to eutrophic problems.

Since both DO and pH are important in the determination of increased or excess nutrient enrichment that could result in a (cultural) eutrophication problem, knowing the general time of day the data are collected is an important factor when interpreting nutrient related responses. For the DOW, nearly all sampling occurs between late morning and early evening, which is the time of greatest plant and algae use of carbon dioxide and the resultant release of oxygen. Excess nutrient enrichment conditions trigger a response in the concentration of diurnal (and diel) DO and a response in pH in the presence of excess nutrients during the growing season (April through October). From late morning into early evening those two response variables often will result in the percent DO saturation exceeding approximately 105 percent coincident with elevated pH greater than 8.5 SU; these are general conditions associated with plant nutrient enrichment. Consideration of the macroinvertebrate community structure for nutrient-tolerant taxa and the related functional structure, or excessive algae/plant growth are additional important elements of the aquatic conditions to take into account when assessing a DU as less than fully supporting.

Minimum General Criteria

The narrative minimum general criteria, 401 KAR 10:031 Section 2:

> *Minimum Criteria Applicable to All Surface Waters. (1) The following minimum water quality criteria shall be applicable to all surface waters including mixing zones, with the exception that toxicity to aquatic life in mixing zones shall be subject to the provisions of 401 KAR 10:029, Section 4. Surface waters shall not be aesthetically or otherwise degraded by substances that:*
>
> *(a) Settle to form objectionable deposits;*
>
> *(b) Float as debris, scum, oil, or other matter to form a nuisance;*
>
> *(c) Produce objectionable color, odor, taste, or turbidity;*
>
> *(d) Injure, are chronically or acutely toxic to or produce adverse physiological or behavioral responses in humans, animals, fish, and other aquatic life;*
>
> *(e) Produce undesirable aquatic life or result in the dominance of nuisance species;*
>
> *(f)1. Cause fish flesh tainting.*
>
> *2. The concentration of phenol shall not exceed 300 μg/L as an instream value.*

(2) The water quality criteria for the protection of human health related to fish consumption in Table 1 of Section 6 of this administrative regulation are applicable to all surface water at the edge of the assigned mixing zones except for those points where water is withdrawn for domestic water supply use.

(a) The criteria are established to protect human health from the consumption of fish tissue, and shall not be exceeded.

(b) For those substances associated with a cancer risk, an acceptable risk level of not more than one (1) additional cancer case in a population of 1,000,000 people, or 1 x 10^{-6} shall be utilized to establish the allowable concentration.

Criteria for each of those general pollutants in Section 2(1)(a – f)1 are promulgated to protect basic water quality and aesthetics from degradation and any acutely toxic substance for which numeric criteria do not exist. Each of these general criteria is applied based on the DU that may be negatively affected. Those criteria in *(a)*, *(b)*, and turbidity of *(c)* are primarily associated with PCR and SCR uses. The criteria found in *(d)* and *(e)* are applicable to aquatic life use, PCR and SCR *(f)1* and *2* to fish consumption. The taste and odor component is applicable to drinking water use.

These criteria are interpreted for assessment through methods and associated indicators particular to each applicable use. The criteria in *(a)*, *(b)*, and turbidity in *(c)* should be considered in the context of the ability to use a water body for swimming, paddle sports, general boating, and aesthetic enjoyment of the water body (i.e., PCR and SCR). The criteria in *(a)*, *(c)* (color and turbidity), *(d)* and *(e)* may be interpreted through biological community composition and chemical information. Color is associated primarily with water quality that may affect aquatic community composition as in some dystrophic lakes; whereas, odor and taste are qualities most often associated with domestic water supply use. Potable water sources that are negatively affected by nutrients and eutrophic conditions often result in taste and odor problems, requiring costly filtration processes to produce a palatable product; turbidity is often a concern in nutrient-enriched water bodies. Reoccurring seasonal conditions with these problems may lead to less than full support of the DWS use.

Protection against fish flesh tainting is provided through (Section 2(1)2 and 2(2)(a,b)). There is a numeric criterion for phenol in Section 2(1)(f)2 (CAS # [Chemical Abstract Number] 108952) of 300 µg/L, while Section 2(2)(a,b) refers one to criteria located in Section 6, Table 1 of Chapter 10:031 for specific numeric human health criteria to protect the resource for fish consumption.

<u>Aquatic Life</u>
Warm water aquatic habitat, 401 KAR 10:031 Section 4 (narrative criteria with guidance follow in this section, the numeric application is provided in section 3.3.2-1 *Numeric Criteria*, above).

Section 4. Aquatic Life. (1) Warm water aquatic habitat. The following parameters and associated criteria shall apply for the protection of productive warm water aquatic communities, fowl, animal wildlife, arboreous growth, agricultural, and industrial uses:

(c) Flow shall not be altered to a degree that will adversely affect the aquatic community;.

Flow is a critical element of the physical habitat; it determines the community composition that naturally inhabits lotic waters, as opposed to lentic-adapted aquatic communities. If flow is altered to some appreciable degree, chemical characteristics such as change to the REDOX (reduction-oxidation) potential, DO and temperature, may be adversely affected. In addition, the alteration of the flow regime can alter the trophic dynamics of streams and rivers. These conditions resulting from flow alterations, in turn, alter the indigenous biological community composition.

Water bodies and segments where the biological community index (particularly sensitive is the macroinvertebrate community) indicate less than a score of *good* may be impacted by altered flow, in addition to, or without, observed chemical impairments. Community composition relative to trophic structure is important in recognizing some flow regime related impairments. For example, in headwater or wadeable streams (generally 1st – 5th [be aware some 5th order streams function as an autotrophic system] Strahler stream order) a shift from the generally shredder-collector-gatherer functional taxa to the scraper-filterer taxa that more generally represent ≥6th (and some 5th) Strahler stream order systems. Dams or other structures that restrict or otherwise modify the natural flow regime often result in a shift of the natural functional feeding species to those associated with filtering suspended fine particulate organic material most common to autotrophic, less erosional systems.

Results where flow and physical habitat alone (i.e., pollution rather than a pollutant, keep in mind sediment is a pollutant) are the only recognized contributors to impairment, this case will result in the aquatic life use assessed and assigned to category 4C. In this scenario, if an additional cause is a pollutant (e.g., DO) that exceeds the criterion, the segment or water body is placed in category 5; included in the causes of impairment on the assessment sheet are the pollutions, for example *Other flow regime alterations* (refer to Appendix D).

3. A successful demonstration concerning thermal discharge limits carried out pursuant to Section 316(a) of the Clean Water Act, 33 U.S.C. 1326, shall constitute compliance with the temperature requirements of this subsection. A successful demonstration assures the protection and propagation of a balanced indigenous population of shellfish, fish, and wildlife in or on the water into which the discharge is made;

(f) Total dissolved solids or specific conductance. Total dissolved solids or specific conductance shall not be changed to the extent that the indigenous aquatic community is adversely affected.

Specific conductivity is a surrogate measure of total dissolved solids (TDS) and is a common measure of pollutants that adversely affect the aquatic community at concentrations that exceed a natural range typical for conductivity/TDS of a water body. This pollutant affects many sensitive species of a healthy aquatic community, potentially resulting in a depauperate assemblage of taxa; especially sensitive are the mayflies (Ephemeroptera). The eastern portion of Kentucky that encompasses ecoregions 68, 69 and 70 is typically naturally low in TDS and therefore conductivity. In these ecoregions, as specific conductivity exceeds 300 µS/cm the MBI score will most often be below the *good* narrative rating indicating less than full support. Therefore, this is a breakpoint where conductivity should be listed as a pollutant when supported by a biological index score indicating the use is not supported. Other ecoregions outside eastern Kentucky where low conductivity may be naturally occurring are Ecoregions 73 and 74, known locally as the Jackson Purchase. For much of the remaining regions of the state conductivity is naturally higher due in large extent to the geology; thus, aquatic communities are adapted to those local (regional) conditions. Evaluation of the community structure is warranted when investigating possible listing of conductivity as a pollutant (cause), especially if the mayflies are absent or poorly represented in the macroinvertebrate community. In the ecoregions outside of ecoregions 68, 69, 70, 73 and 74 caution should be exercised when tying the impairment to conductivity.

(g)Total suspended solids. Total suspended solids shall not be changed to the extent that the indigenous aquatic community is adversely affected;
(h) Settleable solids. The addition of settleable solids that may alter the stream bottom so as to adversely affect productive aquatic communities shall be prohibited.

The standard *g* contain the criterion to protect against TSS (total suspended solids) (e.g., mineral-based such as silt and clay), but may include organic materials. The ambient network provides data on a watershed and ecoregional scale to determine long-term ambient conditions for TSS from which to compare the test water body. The following are DU that are likely to be adversely affected by excess total suspended solids: (a) recreation (swimming); (b) aquatic life (potentially impacts light penetration and sestonic and benthic communities); and (c) drinking water supply (DWS producers may handle TSS without problem). Observation and/or measurement of total suspended solids are necessary to assess this criterion. Levels of TSS that are deemed to impact swimming, aquatic life or drinking water DU must be evaluated based on TSS results, observation and reports. Heavy, ongoing levels of turbidity that impact the water column perpetually with every rain and persists for some time thereafter could result in the listing of TSS, especially if a biosurvey finds sedimentation/siltation impacting the in-stream habitat; another impact under that scenario may be a reservoir where this condition impacts swimming.

TSS is often associated with, and more apparent through, the manifestation of *h*, settleable solids. The criterion for TSS is most often represented in a water body by bottom sediments of sand, clay and silt. To assess this standard, one should have two important pieces of information, the habitat rating and narrative, and observe the biological community structure (especially the benthic macroinvertebrates) if available. For stream (lotic) habitats pay attention to the frequency and presence of riffles, runs and pools with respect to habitat and sedimentation (settleable solids). Streams where pools are no longer deep and are either filled or partially filled with sediment taking away this habitat function are obvious indicators of excess sediments in the system – an indication of the inability for the stream to manage the excess sediment load. Additionally, riffles are the single most important habitat to healthy headwater and wadeable streams. As such, they are targeted for sample collection of macroinvertebrates and fish populations. If the riffles are sedimented-in, show beginning stages of, or are embedded, obstructing the diversity of micro-niches (habitats) for lotic communities, then each of these conditions are indicative of the pollutant sedimnets/siltation. Again, relative expectations to the type of system (high- or low gradient streams), ambient condition of supporting streams, and the use of the reference conditions benchmark, should all be taken into consideration in data evaluation for assessment.

Habitat
Physical habitat is evaluated using qualitative and semi-quantitative measurements of both in-stream and riparian vegetation zone characteristics. This includes the extent and integrity of the riparian vegetative zone, stream macrohabitat, hydrologic function and morphologic characteristics based on stream type. Notation and possible photographic documentation of surrounding land uses, and a description of any observable sources of potential pollutants, should be included. Since this set of information is used only ancillary to biological or chemical in-stream data, an acceptable minimum Level of Information for consideration is 2 (Table 4, Appendix A).

Assessment Dataset
Once the suite of data available for consideration is compiled and the data quality, credibility and sufficiency are determined, the DOW makes the final assessment decision. Figure 3.3.2-1 illustrates the amalgamation of potential datasets to reach final use support assessment decision for aquatic life use. Boatable (non-wadeable) streams will normally only have chemical data, but the dataset will typically be multiyear with a collection frequency of monthly and bimonthly and contain a suite of both conventional and toxic pollutants.

Outstanding State Resource Waters
Those aquatic resources that support federally threatened or endangered species are promulgated with the DU of OSRW and the listed species identified on the Special Waters webpage (http://eppcapp.ky.gov/spwaters/). The loss or measured (e. g., using semi-quantitative transect methods) declining trend of one of these populations constitutes an impairment of use. Since most data obtained are USFWS contracted studies and typically not quantitative, statistical analysis is not typically an option. Documented mortality (e.g., recent mussel die-off as indicated by the [fresh] condition of empty shells) of individuals of the listed species that indicate an important population reduction, or absence, constitutes impairment. Additionally, to protect the federally listed population, the regulation states that existing habitat and water quality shall be maintained; therefore, water quality and habitat quality that were present at the time the water body was accepted for inclusion as an OSRW should, if available, be compared with future datasets to assure there is no decline. A measured important decline indicates impairment of the DU. Waters where previously unknown or newly listed populations of federally threatened or endangered species inhabit are automatically included in each triennial review of WQS.

Those OSRW that are listed under the permissible conditions in 401 KAR 10:031 Section 8(1) 1 and 2 are afforded the protection of sections 1 – 6 of 401 KAR 10:031 and 401 KAR 10:031(2)(a), at a minimum. As of 2015, only one OSRW is promulgated (as of 2015) due to these provisions, Jessamine Creek, Jessamine County. Any applicable WAH or CAH criterion that exceeds the standard results in impaired listing for both WAH and OSRW.

OSRW that qualify via provisions in 401 KAR 10:031 Section 8(2)(b) that are listed as Exceptional Waters in 401 KAR 10:031, Section 1(2) shall have at a minimum DO maintained at 6.0 mg/L as a 24-hour average and instantaneous DO maintained at 5.0 mg/L. The non-attainment of the DO criterion constitutes impairment of the OSRW DU. Any applicable criterion to WAH or CAH that exceeds the standard result in the impaired listing of both WAH or CAH and OSRW.

Lakes and Reservoirs

Lakes and reservoirs are assessed for aquatic life use by measuring several chemical indicators, in conjunction with confirmed reported or observed fish kills or nuisance algae blooms. Those confirmed observed or reported conditions must be tied to general water quality conditions rather than a brief episodic (up to several days) event. Harmful algal blooms (HAB) are part of the nuisance algae blooms category. The DOW started monitoring for HAB in 2013 and has coordinated with the USACE, the state health department and other agencies as appropriate. Without EPA recommended safe drinking water MCLs in finished water for HAB-related toxins, the DOW currently considers the World Health Organization (WHO) threshold of 1 µg/L for microcystin as indication of safe levels in finished drinking water.

The lack of a community-based biological indicator is primarily due to the fact that these resources are most often manmade, thus supporting altered and unnatural biological communities such as benthic organisms that are often composed of tolerant species (e.g., Tubificidae, *Chironomus* spp., *Chaoborus* spp., *Glyptotendipes* spp.) that are capable of exploiting this often DO-stressed environment. Thus, the core and supplemental indicators shown in Table 3-1 are of utmost importance to assure water quality conditions are suitable for supporting sportfish and associated prey fishes. Healthy populations of these fishes are the primary management concern for aquatic life use in many of these habitats. With all downstream water bodies, the reservoir monitoring programs aids in the effort to ensure downstream (below dam) DUs are supported.

DO is a key indicator of the health of a lake or reservoir. Profiles of DO concentration are produced in every monitored lake or reservoir, along with percent DO saturation, pH and specific conductivity. Under seasonal sampling conditions, these water bodies are stratified from mid-spring and usually until the second-half of September. Those stratified water bodies supporting the use should always have a DO concentration at or above 4.0 mg/L throughout the epliminon (region of the trophogenic zone) and will exhibit a gradually decreasing DO concentration in the metalimnion. In a stratified lake, the hypolimnion overlays the profundal zone – this region is a concentrated area of decomposition containing the tropholytic zone – where DO depletion is common with increased carbon dioxide (CO_2) production. The pH and conductivity may increase with depth in many reservoirs due to the increased organic matter associated with the profundal habitat; however, there may be lower pH in the profundal zone due to elevated CO_2, enhancing conditions favorable for carbonic acid production.

Trophic state in lakes and reservoirs is determined using the Carlson TSI (trophic state index) for chlorophyll *a*. Based on the TSI, lakes and reservoirs are ranked numerically according to increasing trophic state, the numeric ranges correspond to oligotrophic, mesotrophic, eutrophic, and hypereutrophic states. The growing season (April through October) average TSI value is used to rank each lake. For reservoirs with one sample station, the average growing season TSI is calculated. Lakes and reservoirs with multiple stations are calculated the same way, calculating each seasonal TSI per station, then average each station by itself, followed by averaging all station TSI values to get the water body TSI. The current and historic TSI (especially if it has increased and crossed trophic states) are both taken into account when assessing these water bodies. Increased TSI does not independently equate to non-supporting conditions, but over time may be symptomatic of cultural nutrient enrichment.

While it is often reasonable to make an integrated assessment for lakes and reservoirs, there are circumstances where one may need to divide the water body into sections or zones. For example, a particular embayment might exhibit markedly different water quality conditions from the rest. This result may trigger an embayment of a large lake to be assessed independently from the remainder of the water body.

3.4 Assessment of Primary Contact Recreation Use

Primary contact recreation use and associated criteria are developed to protect swimmers and other recreationalists who plan to expose themselves to full body immersion. Both fecal coliforms and *E. coli* are indicators of the likelihood for the presence of pathogens in a water body. Although both indicators are in the DEP regulations, *E. coli* is the preferred indicator because it has a stronger association with pathogenic agents and therefore it is the bacterium indicator regularly collected and analyzed by DOW for PCR use support. Currently, the DOW will assess PCR based on fecal coliform data; however, this criterion is planned to sunset and language to phase it out is anticipated during the 2015 triennial review of water quality standards.

The applicable criteria (401 KAR 10:031 Sections 2(1)(a – e) and 7(1)) in WQS apply to this DU from May 1 through October 31. Regulation 401 KAR 10:031 Section 2(1)(a – e) apply as noted in Section 3.3.2 “Narrative Criteria” above. The two numeric criteria applicable are bacteria (*E. coli*) and pH. Determination of use support based on bacteria follows:

<u>Single Sample Maximum Criterion</u>

- fully supported when the single sample maximum is not met in ≤20 percent of six monthly samples collected over the six month recreation period (if only five [minimum for assessment] monthly samples could be collected, than if the criterion is not met in two or fewer of the five samples it is considered fully supported);

- partially supported if the criterion is not met in >20 to 33 percent of those samples collected over the six month recreation period; and
- not supported if the criterion was not met in >33 percent of those samples collected over the six month recreation period.

30-Day Geometric Mean Criterion

- fully supported when the geometric mean of five samples collected during a 30-day period during the six month recreation period do not exceed the 30-day criterion;
- partially supported when the geometric mean of five samples collected over a 30-day period during the six month recreation period exceed the criterion; and
- not supported when the geometric mean of two sets of five samples collected in differing 30-day periods exceed the criterion of the six month recreation period.

In addition, the water quality parameter pH applies to PCR use. The criterion for pH may range between 6.0 – 9.0 SU, but cannot vary more than 1.0 SU over a 24-hour period. Where applicable, the criterion is applied to any water body to determine use support as follows:

- fully supported when the criterion is exceeded once, but in <10 percent of the samples during the recreation season;
- partially supported when the criterion is exceeded in >10 to 25 percent of samples collected;
- not supported when the criterion is exceeded in >25 percent of samples during the recreation season.

The narrative minimum general criteria, 401 KAR 10:031 Section 2, applicable to PCR follows:

> *Minimum Criteria Applicable to All Surface Waters. (1) The following minimum water quality criteria shall be applicable to all surface waters including mixing zones, with the exception that toxicity to aquatic life in mixing zones shall be subject to the provisions of 401 KAR 10:029, Section 4. Surface waters shall not be aesthetically or otherwise degraded by substances that:*
>
> *(a) Settle to form objectionable deposits;*
>
> *(b) Float as debris, scum, oil, or other matter to form a nuisance;*
>
> *(c) Produce objectionable color, odor, taste, or turbidity;*
>
> *(d) Injure, are chronically or acutely toxic to or produce adverse physiological or behavioral responses in humans, animals, fish, and other aquatic life;*
>
> *(e) Produce undesirable aquatic life or result in the dominance of nuisance species.*

Any material such as sediment, silt, turbidity (cloudy water), excess trash (either submerged or floating), oil slicks (unnatural), unpleasant odor, that form and have more than an ephemeral presence (i.e., has some persistence that is greater than two days) and precludes recreational activity associated with PCR (swimming/bathing) apply to this DU and may result in non-support. Section 2(1)(e) particularly applies to lakes and reservoirs, but equally applies to streams if conditions exist. Any lake or reservoir where swimming is not restricted (e.g., many DFWR managed water bodies prohibit swimming) that has rooted or floating aquatic plants or algae restricting reasonable access to open water for swimming may result in non-support of the PCR DU.

Regulation 401 KAR 10:031 Section 2(1)(d) has a human health component that if conditions are met results in non-support of this DU. An example of a condition applicable to the criterion is toxins produced at a level by blue-green algae (often considered a nuisance species) that may result in adverse human physiological or behavioral reactions.

3.5 Assessment of Secondary Contact Recreation Use

Secondary contact recreation use and associated criteria are in place to protect the recreationalist when activity does not involve full body emersion (e.g., incidental contact or wading). Pathogen-indicating bacteria, fecal coliforms, and pH are the principle indicators established to determine SCR support.

The applicable criteria (401 KAR 10:031 Sections 2(1)(a – e) and 7(2)) in WQS apply to this DU year-round. Regulation 401 KAR 10:031 Section 2(1)(a – e) apply as noted in Section 3.3.2 “Narrative Criteria” above. The two numeric criteria applicable are fecal coliforms and pH. Determination of use support based on fecal coliforms follows:

<u>Single Sample Maximum Criterion, minimum of six monthly samples collected during a calendar year for assessment</u>

- fully supporting when the criterion is exceeded in ≤20 percent;
- partially supporting if the criterion is exceeded in >20 to 33 percent of samples; and
- non-supporting if the criterion is exceeded in >33 percent of samples.

<u>30-Day Geometric Mean Criterion</u>

- fully supporting when the geometric mean of five samples collected during a 30-day period does not exceed the criterion;
- partially supporting when the geometric mean of five samples collected during a 30-day period exceed the criterion; and
- non-supporting when the geometric mean of two sets of five samples collected in differing 30-day periods exceed the criterion.

In addition, the water quality parameter pH applies to SCR use. The criterion for pH may range between 6.0 – 9.0 SU, but cannot vary more than 1.0 SU over a 24-hour period. The water body assessed for this water quality criterion follows:

- fully supporting when the criterion is exceeded once, but ≤10 percent of the samples during the recreation season;
- partially supporting when the criterion is exceeded in >10 to 25 percent of samples collected;
- non-supporting when the criterion is exceeded in >25 percent of samples.

The narrative minimum general criteria, 401 KAR 10:031 Section 2(1)(a – e) applicable to SCR follows:

> *Minimum Criteria Applicable to All Surface Waters. (1) The following minimum water quality criteria shall be applicable to all surface waters including mixing zones, with the exception that toxicity to aquatic life in mixing zones shall be subject to the provisions of 401 KAR 10:029, Section 4. Surface waters shall not be aesthetically or otherwise degraded by substances that:*
>
> *(a) Settle to form objectionable deposits;*
>
> *(b) Float as debris, scum, oil, or other matter to form a nuisance;*
>
> *(c) Produce objectionable color, odor, taste, or turbidity;*
>
> *(d) Injure, are chronically or acutely toxic to or produce adverse physiological or behavioral responses in humans, animals, fish, and other aquatic life;*
>
> *(e) Produce undesirable aquatic life or result in the dominance of nuisance species.*

Any form of material such as sediment, silt, turbidity (cloudy water), excess trash (either submerged or floating), oil slicks (unnatural), unpleasant odor, etc., that form and have more than an ephemeral presence (i.e., has some persistence that is greater than two days) that precludes recreational activity associated with SCR (e.g., paddlesports, boating, wading, fishing) apply to this DU and may result in non-support. Section 2(1)(e) listed above particularly applies to lakes and reservoirs (although uncommon to local streams it equally applies to those water body types if conditions warrant). Any lake or reservoir that has rooted or floating aquatic plants or algae restricting reasonable access or precludes a recreational activity such as fishing may result in non-support of the SCR DU.

Regulation 401 KAR 10:031 Section 2(1)(d) has a human health component that if met results in non-support of this DU. An example given in the previous section applies equally for SCR under conditions that may result in adverse human physiological or behavioral reactions.

3.6 Assessment of Fish Consumption

Fish consumption is not a DU per state regulation. However, there exists human health criteria in WQS for the protection of the population should they choose to catch or buy local fish flesh for consumption. Examples of pollutants of concern are methylmercury and PCBs. Those core and supplemental indicator pollutants are identified in Table 3-1. Applicable criteria may be found in WQS 401 KAR 10:031 Sections 2 and 6.

In 2001 the EPA issued a national recommended criterion for methylmercury (greater than 0.3 mg/Kg) in fish tissue for the safe consumption of fish flesh. For purposes of assessment, the arithmetic average methylmercury concentration of the composite samples is compared to the criterion for exceedence of 0.3 mg/Kg methylmercury. Each trophic level is treated equally with no assumed proportion of consumption made. Determination of use support based on this pollutant follows:

- fully supporting when fish tissue residue is ≤0.3 mg/Kg;
- partially supporting when fish tissue residue is >0.3 mg/Kg to 1.0 mg/Kg; and
- non-supporting when fish tissue residue is ≥1.1 mg/Kg.

Composite filet samples of fish species are collected per SOP (http://water.ky.gov/Documents/QA/ProceduresforResectionofFishFilletsandHomogenizationofTissueSamples.pdf), concentrating on trophic levels 3 (e.g., bluegill, longeared sunfish, and crappie) and 4 (e.g., large- and smallmouth bass, walleye, sauger, muskie). Larger (older) individuals in a population are targeted for collection given they usually represent the greatest potential contamination of methylmercury. Each composite sample of fish are represented by the same species and are of similar size so that the smallest individual is no less than 75 percent of the total length of the largest individual (USEPA 2000).

The Food and Drug Administration (FDA) protocols for fish consumption advisories for PCBs are based on fish tissue residue concentrations which are triggered when tissue residue exceeds 0.2 mg/Kg. The ranges below are based on the FDA concentration limit that is recommended not to exceed the 0.2 mg/Kg and are utilized to determine whether the implied fish consumption use is fully supported or not. The concentrations at which various degrees of support follow:

- fully supported when the average of composite fish tissue samples is ≤0.2 mg/Kg;
- partially supported when the average of composite fish tissue samples is >0.2 mg/Kg to 1.0 mg/Kg; and
- not supported when the average of composite fish tissue samples is ≥1.1 mg/Kg.

3.7 Domestic Water Supply Use

The MCLs in WQS applicable to this use are found in 401 KAR 10:031. While this DU applies to all water bodies in the Commonwealth, the use is only implemented (via criteria, 401 KAR 10:031) at the point of water withdrawal by a public treatment facility. Public water systems are defined as those systems that have at least 15 service connections or regularly serve an average of 25 or more individuals (40 CFR 141.2) (http://www.gpo.gov/fdsys/pkg/CFR-2010-title40-vol22/pdf/CFR-2010-title40-vol22-sec141-2.pdf). In addition, the Commonwealth regulates facilities that are known as "semi-public" water systems. These serve more than three residences, but are smaller than public water systems.

This use is primarily assessed through compliance with the MCLs in finished water (Table 3-1). A treatment facility's finished product must meet all non-disinfectant by-product MCLs (because the DU is assessed for the source water quality) based on the annual average of the quarterly sample results. An exceedence or violation of an MCL reported in the CCR indicates less than full use support of the water body. The DOW considers four or five years for DU assessment. If available, the DOW will consider in-stream data and compare against the standards for DWS; gradations of use support assessment are as follows:

- fully supported if all MCLs are met as reported in the CCR or if all criteria are not met in ≤10 percent of samples collected from the point of withdrawal;
- partially supported if one MCL exceeds the criterion in the CCR or in-stream data at point of withdrawal exceeded any criterion in >10 – 25 percent of samples; and
- not supported if two or more MCLs exceed the criteria per the CCR or in-stream data at point of withdrawal exceed any criterion in >25 percent of samples.

3.8 Threatened Use Assessment Category

This category is used for water bodies that currently support the DU, but are not expected to in the future. This determination requires placing the water body into Category 5 (U.S. EPA 2005) and therefore on the 303(d) list requiring a TMDL, 40 CFR 130.7(b) (http://www.gpo.gov/fdsys/pkg/CFR-2007-title40-vol21/pdf/CFR-2007-title40-vol21-sec130-7.pdf). For the water body to be considered threatened, datasets must indicate a clearly declining aquatic community or water quality trend over time. Valid statistical methodology should be applied indicating the decline and show the projected trend will result in the water body not fully supporting the DU by the date of the next listing cycle (the listing cycle is every two years).

3.9 Determining Extent of Coverage for Use Assessment

In general, the more robust the dataset the greater the confidence will be when determining the extent of the assessment results. Determination of the extent of coverage of an assessment is variable and the following are some initial considerations:

- stream order or relative volume to area drained;
- data type, chemical only or biological and chemical;
- frequency of data collection;
- period of data record; and
- predominant land uses downstream, but especially upstream of the sample locations.

Ambient Water Quality – Aquatic Life, PCR and SCR

Stations monitored for chemical parameters only typically occur at the ambient network locations; however, some may have biological data. These stations are usually located in large watersheds, the mid-points and downstream lower drainage reaches of 8-digit HUCs. These stations are monitored for a robust set of parameters that are sampled frequently, monthly in the BMU-year and bimonthly during the four intervening years. Given the network is designed to provide data on a large scale, these assessment units typically are larger than streams monitored with a limited frequency. Assessment segments are determined based on downstream and upstream substantial tributaries. The substantial tributaries are those that discharge a volume deemed to contribute a quantity that alone has an influence on the water quality of the monitored stream. Another important consideration is large-scale habitat conditions, particularly areas of intense landuse practices that disturb substantial areas (e.g., cities, towns, resource extraction or agriculture).

Headwater and Wadeable Streams – Aquatic Life

Water bodies in this category are smaller watersheds, the largest approximating 250-mi^2 and most are smaller watersheds that typically are drained by streams that fall into 1st – 5th Strahler stream order (Strahler, 1952). Data obtained in the headwater and wadeable streams monitoring programs usually have biological community data and chemical data obtained from one-time sample events. Segments assessed with these datasets are necessarily relatively short. Biological data are typically sensitive to subtle changes in environmental conditions, particularly habitat integrity. Of particular consideration in headwater and wadeable streams is both in-stream habitat and riparian habitat corridor integrity. The smaller the watershed, typically the quicker the biological response to perturbations since these water bodies have smaller areas of in-stream habitats and the exposure of the biological community to disturbance gradients occurs rather quickly. This is contrasted to relatively large wadeable streams commonly of 4th and 5th Strahler order with greater in-stream habitat availability and greater flow that may buffer change in water quality and habitat integrity.

Because of this, a fully supporting or non-supporting headwater stream will necessarily be of a small assessment segment, but will likely be of significant length relative to watershed. Streams of all sizes should be canvassed via GIS to obtain the locations of any point source discharges (DOW GIS layers provide this type of information). DMR information should be reviewed if the data indicate less than full support and the determination is based on water quality chemistry data rather than primarily habitat perturbations. Most commonly, the assessment segment should begin and end at tributary mouths that are either draining a large watershed in relative area or contribute substantial flow relative to the receiving stream being assessed. Also, consider any tributaries that are assessed as less than full support and the landuses of tributaries in general, relative to the stream being assessed.

Fish Consumption

Segments monitored for support determination for fish consumption are defined in a similar method as those reaches assessed using only chemical or bacteria data. Some large river fish species are relatively far ranging, which is significant when defining segments if this is the only use being assessed. Also, with the plethora of sources – especially for mercury that may reach the aquatic environment via multiple pathways including atmospheric deposition – relatively long reaches are typically defined when making these assessments, whether supporting or not. Significant tributaries are often used to determine the upstream and downstream termini, with less consideration given to habitat. In boatable streams that have locks and dams, the intervening pool between each is usually considered an assessment unit.

Drinking Water

Given this use is typically assessed utilizing finished water data supplied by PWS through the CCR and the DU is only implemented at point of withdrawal, the assessed source water segments are usually conservative. The assessment segments are typically taken from the point of withdrawal and extended upstream one mile. A few exceptions to that rule occur when multiple uses are assessed (e.g., fish tissue, aquatic life) in the same general area of PWS withdrawal points. Those segments are usually longer in order to accommodate other assessed uses that overlap the PWS withdrawal point. For reservoirs the assessment is generally applied to the water body.

Reservoirs and Lakes

Because these water bodies have considerable retention time relative to streams, water quality monitoring normally occurs at a single location (forebay) or at additional locations within major tributary arms (embayments) of large reservoirs. Data are normally collected to assess the aquatic life use and SCR, although infrequent bacteria samples may be collected; generally PCR is not assessed lacking sufficient frequency. Additionally, many of the reservoirs owned and managed by DFWR are posted as *no swimming* water bodies. The no swimming postings are not a result of impairment of the DU, but are a management and safety decision by the DFWR.

While normally the assessment unit is the reservoir or lake, under certain circumstance there could be reason to assess an embayment separately from the main lake if that embayment has water quality differing to the degree it warrants treatment as a separate assessment unit. Such conditions would likely only present itself in large, USACE or TVA reservoirs and may be most likely associated with excess nutrients that are near the tipping point of DU support, or are impaired.

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Appendix A

USGS HUC Reference Tables and Sample Assessment Form

Table 1. The U.S. Geological Survey 8 Digit HUC (hydrologic unit code) presented by basin management unit with stream miles as determined by the National Hydrography Dataset (NHD).

HUC Name	HUC Code	Stream Miles 1:24,000 Scale
Kentucky River BMU		
North Fork Kentucky	05100201	2872
Middle Fork Kentucky	05100202	1213
South Fork Kentucky	05100203	1533
Upper Kentucky	05100204	2644
Lower Kentucky	05100205	7809
Salt River – Licking River BMU		
Salt River Basin		
Silver – Little Kentucky	05140101	1376
Salt	05140102	3615
Rolling Fork	05140103	3645
Blue – Sinking	05140104	985
Licking River Basin		
Licking	05100101	7239
South Fork Licking	05100102	2331
Ohio Brush – White Oak	05090201	2087
Middle Ohio - Laughery	05090203	1044
Upper Cumberland – 4-Rivers BMU		
Upper Cumberland	05130101	4181
Rockcastle	05130102	1783
Upper Cumberland – Lake Cumberland	05130103	3439
South Fork Cumberland	05130104	808
Obey	05130105	223
4-Rivers		
Lower Cumberland	05130205	2790
Red	05130206	717

HUC Name	HUC Code	Stream Miles 1:24,000 Scale
Kentucky Lake	06040005	932
Lower Tennessee	06040006	2126
Lower Ohio	0514206	727
Lower Mississippi – Memphis	08010100	272
Bayou de Chien – Mayfield	08010201	2788
Obion	08010202	382
<u>Green – Tradewater BMU</u>		
Green		
Upper Green	05110001	6008
Barren	05110002	2647
Middle Green	05110003	2289
Rough	05110004	2439
Lower Green	05110005	2484
Pond	05110006	1955
Lower Ohio – Little Pigeon	05140201	1036
Tradewater		
Tradewater	05140205	2658
Highland – Pigeon	05140202	1148
Lower Ohio – Bay	05140203	1131
<u>Big Sandy – Little Sandy – Tygarts BMU</u>		
Big Sandy		
Tug	05070201	898
Upper Levisa	05070202	619
Lower Levisa	05070203	2167
Big Sandy	05070204	815

HUC Name	HUC Code	Stream Miles 1:24,000 Scale
Little Sandy		
Little Sandy	05090104	1888
Tygarts		
Little Scioto - Tygarts	05090103	1219

Below is an example of the 305(b) assessment form. Note: Due to formatting requirements of the document this form does not conform to the layout design in use.

305(b) Assessment Form
(Complete a form for each assessed segment)

Sample Year: __________

305(b) Cycle Year (DOW only): ________

Basin Management Unit: ______________________________

Stream or Reservoir Name: ____

GNIS ID: __ __ __ __ __ __ **Segment #** (DOW only)**:** __ __ **Stream Length (miles) (w/in KY):**_______.___
(exclude reservoir miles)

Lake/Reservoir Area (acres):___________

ADB ID # (DOW only)**:** KY____

USES Assessed (tick all that apply)**:** Aquatic Life (20WAH) ____ (20CAH) ____; Fish Consumption (21) ____;

Primary Contact Rec. (42) ____; Secondary Contact Rec. (44) ____; Drinking Water (50) ____

Receiving Water: ____

Assessment Reach: **Downstream/Upstream MP:** ______.____ to ______.____ **Segment Length:** ______.____

Downstream Lat. (dd.ddddd): ____._________ **Long.** (dd.ddddd): - ____._________

Upstream Lat. (dd.ddddd): ____._________ **Long.** (dd.ddddd): -____._________

Downstream/Upstream Description: ______________________________ to ______________________________

Sample Site Mile Point: _____.____ **Lat.** (dd.ddddd): ____.__________ **Long.** (dd.ddddd): -____.__________

Topographic Map Name (1:24K) (sample location): ____

Major Basin (circle one)**:** Big Sandy; Little Sandy; Tygarts; Licking; Salt; Green; Tradewater; Upper Cumberland; Lower Cumberland; Kentucky; Mississippi; Ohio; Tennessee

USGS (8-digit) Cataloging Unit: ______________________ **County(s)** (sample site)**:** ______________________

Station ID: ______________________ **Sampling Date:** Start: ____-____-____; End: ____-____-____ (mm-dd-yy)

Assessment Date (DOW use only)**:** ____-____-____ (mm-dd-yy) **Data Type:** Monitored or Evaluated (circle)

Community Score: MBI ____.__; KIBI _____.__; DBI _____.__ **Number of sites:** __________

Biological Integrity (circle one)**:** Excellent Good Fair Poor

Trophic State Index: _____; (circle one): Oligotrophic; Mesotrophic; Eutrophic; Hyper-eutrophic: **Trend** (circle one): ↑ ↓ ↔

Aquatic Life (AL) Use Support Table (tick all that apply)

Aquatic Life	**Full**	**Partial**	**Non-support**	**Full but Threatened**	**Level of Info 1 - 4**
Habitat					
Biological					
chemical					
Toxicity					

USE Support, AL (DOW only): Full Partial Support Non-support Full but Threatened

Assessment Codes: ____

Cause Code: ________ **Source Code(s):** ____
Cause Code: ________ **Source Code(s):** ____
Cause Code: ________ **Source Code(s):** ____
Cause Code: ________ **Source Code(s):** ____
Cause Code: ________ **Source Code(s):** ____
(*Note: At least one Source Code must be assigned to each Cause Code*) Kentucky Division of Water – 04-18-2013

Fish Consumption (21)

USE Support: Full Partial Support Non-support Full but Threatened (circle one)

Assessment Codes: ____

Cause Code: _______ **Source Code(s):** ____
Cause Code: _______ **Source Code(s):** ____
Cause Code: _______ **Source Code(s):** ____

Primary Contact Recreation (swimming) **(42)**

USE Support: Full Partial Support Non-support Full but Threatened (circle one)

Assessment Codes: ____

Cause Code: _______ **Source Code(s):** ____
Cause Code: _______ **Source Code(s):** ____

Secondary Contact Recreation (44)

USE Support: Full Partial Support Non-support Full but Threatened (circle one)

Assessment Codes: ____

Cause Code: _______ **Source Code(s):** ____

Drinking Water (50)

USE Support: Full Partial Support Non-support Full but Threatened (circle one)

Assessment Codes: ____

Cause Code: _______ **Source Code(s):** ____
Cause Code: _______ **Source Code(s):** ____

Assessment Category (DOW use only)

Category	Definition	**Uses** (circle all that apply)
1	All designated uses for waterbody Fully Supporting.	20WAH 20CAH 21 42 44 50 316OSRW
2	Assessed designated use(s) is/are Fully Supporting, but not all designated uses assessed.	20WAH 20CAH 21 42 44 50 316OSRW
2B	Segment currently supporting use(s), but 303(d) listed & proposed to EPA for delisting.	20WAH 20CAH 21 42 44 50 316OSRW
2C	Segment with an EPA approved or established TMDL for the following use(s) now attaining Full Support. TMDL approval #___________________.	20WAH 20CAH 21 42 44 50 316OSRW
3	Designated use(s) has/have not been assessed (insufficient data).	20WAH 20CAH 21 42 44 50 316OSRW
4A	Segment with an EPA approved or established TMDL for the following listed use(s) not attaining Full Support. TMDL appr. #_______________	20WAH 20CAH 21 42 44 50 316OSRW
4B	Nonsupport segment with an approved alternative pollution control plan (e.g., BMP) stringent enough to meet full support level of all uses within a specified time.	20WAH 20CAH 21 42 44 50 316OSRW
4C	Segment is not meeting Full Support of assessed use(s), but this is not attributable to a pollutant or combination of pollutants.	20WAH 20CAH 21 42 44 50 316OSRW
5	TMDL is required.	20WAH 20CAH 21 42 44 50 316OSRW
5B	Segment does not support designated uses based on evaluated data, but based on KY listing methodology, insufficient data are available to make a listing determination. No TMDL needed.	20WAH 20CAH 21 42 44 50 316OSRW

Assessment Information Source: (circle/insert all that apply)

DOW	DOW	University	Federal	State	Other
Amb. WQ	Reservoir	EKU	COE	DFWR	ORSANCO
Amb. Bio.	GDW	Morehead SU	EPA	KGS	MSD
WBM	NPS	Murray SU	TVA	SNPC	LFUCG
Bact	Fish Tissue	UK	USFS	TN	Volunteer
IS	PWS	UL	USF&WS	VA	
RR	DMR	WKU	USGS	WV	
FO	TMDL				
ProbMon					

Appendix B

Level of Information and Water Body System Codes

Table 1. Hierarchy of bioassessment approaches for evaluation of aquatic life use attainment based on resident assemblages (U.S. EPA, 1997).

Level of Info[a]	Technical Components	Spatial/Temporal Coverage	Data Quality[b]	WBS Codes[c]
1	Visual observation of biota; reference conditions not used; simple documentation	Limited monitoring; extrapolations from other sites	Unknown or low precision and sensitivity; professional biologist not required	310, 320, 350, 322
2	One assemblage (usually invertebrates); reference conditions pre-established by professional biologist; biotic index or narrative evaluation of historical records	Limited to a single sampling; limited sampling for site-specific studies	Low to moderate precision and sensitivity; professional biologist may provide oversight	310, 320, 322, 350
3	Single assemblage usually the norm; reference condition may be site-specific or composite of sites (e.g., regional); biotic index (interpretation may be supplemented by narrative evaluation of historical records)	Monitoring of targeted sites during a single season; may be limited sampling for site-specific studies; may include limited spatial coverage for watershed-level assessments	Moderate precision and sensitivity; professional biologist performs survey or provides training for sampling; professional biologist performs assessment	310, 315, 320, 321, 330, 331, 350
4	Generally two assemblages, but may be one if high data quality; regional (usually based on sites) reference conditions used; biotic index (single dimension or multimetric index)	Monitoring during 1-2 sampling seasons; broad coverage of sites for either site-specific or watershed assessments; conducive to regional assessments using targeted or probabilistic design	High precision and sensitivity; professional biologist performs survey and assessment	310, 315, 320, 321, 330, 331, 340, 350

NOTE: Table is based on use in lotic systems. With some modification, these approaches would apply to other water body types.
[a] Level of information refers to rigor of bioassessment, where 1 = lowest and 4 = highest.
[b] Refers to ability of the ecological endpoints to detect impairment or to differentiate along a gradient of environmental conditions.
[c] WBS (Water body System) Assessment Type Codes from Table 1-1.

Table 2. Hierarchy of habitat assessment approaches for evaluation of aquatic life use attainment (U.S. EPA, 1997).

Level of Info[a]	Technical Components	Spatial / Temporal Coverage	Data Quality[b]	WBS Codes[c]
1	Visual observation of habitat characteristics; no true assessment; documentation of readily discernable land use characteristics that might alter habitat quality; no reference conditions	Sporadic visits; sites are mostly from road crossings or other easy access	Unknown or low precision and sensitivity; professional scientist (biologist, hydrologist) not required	365
2	Visual observation of habitat characteristics and simple assessment; use of land use maps for characterizing watershed condition; reference condition pre-established by professional scientist	Limited to annual visits and non-specific to season; generally easy access; limited spatial coverage and/or site-specific studies	Low precision and sensitivity; professional biologist or hydrologist not involved or only correspondence	370
3	Visual-based habitat assessment using standard operating procedures (SOPs); may be supplemented with quantitative measurements of selected parameters; conducted with bioassessment; data on land use compiled and used to supplement assessment; reference condition used as a basis for assessment	Assessment during a single season usually the norm; spatial coverage may be limited or broad and commensurate; assessment may be regional or site specific	Moderate precision and sensitivity; professional biologist or hydrologist performs survey or provides oversight and training	375
4	Assessment of habitat based on quantitative measurements of instream parameters, channel morphology, and floodplain characteristics; conducted with bioassessment; data on land use compiled and used to supplement assessment; reference condition used as a basis for assessment	Assessment during 1-2 seasons; spatial coverage usually broad and commensurate with biological sampling; assessment may be regional or site-specific	High precision and sensitivity; professional biologist or hydrologist performs survey and assessment	380

NOTE: Table is based on use in lotic systems. With some modification, these approaches would apply to other water body types.
[a] Level of information refers to rigor of bioassessment where 1 = lowest and 4 = highest.
[b] Refers to ability of the habitat endpoints to detect impairment or to differentiate along a gradient of environmental conditions.
[c] WBS (Water body System) Assessment Type Codes from Table 1, Appendix C.

Table 3. Hierarchy of physical/chemical data levels for evaluation of aquatic life use attainment (modified from U.S. EPA, 2002 and 1997).

Level of Info[a]	Technical Components	Spatial/Temporal Coverage	Data Quality[c]	WBS Codes[d]
1	Any <u>one</u> of the following: • Water quality monitoring using grab water sampling • Water data extrapolated from an upstream or downstream station where homogeneous conditions are expected • Monitoring date >5 years old without further validation • Best professional judgment based on land use date, source locations	Low spatial and temporal coverage: • Quarterly or less frequent sampling with limited period of record (e.g., 1 day) • Limited data during key periods or at high or low flows (critical hydrological regimes)[b] • Data are >5 years old and are not reflective of current conditions	Unknown /Low	210, 220, 230, 240, 850, 150, 130
2	Any one of the following: • Water quality monitoring using grab water sampling • Rotating basin surveys involving multiple visits or automatic sampling • Synthesis of existing or historic information on fish contamination levels • Screening models based on loadings data (not calibrated or verified)	Moderate spatial and temporal coverage: • Bimonthly or quarterly sampling during key periods (e.g., spring/ summer months) • Fish spawning seasons, including limited water quality data at high and low flows • Short period of record over a period of days or multiple visits during a year or season • Data are <5 years old and there is high certainty that conditions have not changed since sampling	Low/ Moderate	210, 220, 222, 230, 240, 242, 260, 810, 180
3	Any one_of the following: • Composite or a series of grab water sampling used (diurnal coverage as appropriate) • Rotating basin surveys involving multiple visits or automatic sampling • Calibrated models (calibration data < 5 years old)	Broad spatial and temporal (long term, e.g., ≥ 3 years) coverage of site with sufficient frequency and coverage to capture acute events: • Typically, monthly sampling during key periods(e.g., spring/ summer months, fish spawning seasons), multiple samples at high and low flows • Lengthy period of record (sampling over a period of months) • Data are <5 years old and there is high degree of certainty that conditions have not changed since sampling	Moderate /high	211, 222, 242, 250, 610

Level of Info[a]	Technical Components	Spatial / Temporal Coverage	Data Quality[c]	WBS Codes[d]
4	Follows defined sampling plan which includes the following elements: • Description of how sample is representative of target populaiton • Defined data quality objectives, including error rate, confidence interval, sample size	Broad spatial (several sites) and temporal (long-term, e.g., ≥ 3 years) coverage of site with sufficient frequency and coverage to capture acute events, chronic conditions, and all other potential P/C impacts • Monthly sampling during key periods (e.g., spring/ summer months, fish spawning seasons) including multiple samples at high and low flows • Fish spawning seasons including multiple samples at high and low flows • Continuous monitoring	High	231, 242, 250

NOTE Physical refers to physical water parameters (e.g., temperature, pH, dissolved oxygen, turbidity, color, conductivity).

[a] Level of information refers to rigor of physical/chemical sampling and analysis, where 1 = lowest and 4 = highest.

[b] Even a short period of record can indicate a high confidence of *impairment* based on P/C data; 3 years of data are not required to demonstrate impairment. For example, a single visit to a stream with severe acid mine drainage impacts (high metals, low pH) can result in high confidence of non-support. However, long-term .

[c] Refers to ability of the toxicity endpoints to detect impairment or to differentiate along a gradient of environmental conditions.

[d] WBS (Water body System) Assessment Type Codes from Table 1, Appendix C.

Appendix C

Assessment Codes modified from the EPA Waterbody System

Table 1. Assessment type codes from the waterbody system (modified from U.S. EPA, 1997).

100 Qualitative (evaluated) assessment--unspecified[a]
110 Information from local residents
120 Surveys of fish and game biologists/other professionals
130 Land use information and location of sources
140 Incidence of spills, fish kills, or abnormalities
150 Monitoring data that are more than 5 years old
175 Occurrence of conditions judged to cause impairment (e.g., channelization, dredging, severe bank erosion)
176 Occurrence of conditions not judged to cause impairment (e.g., channelization, dredging,
severe bank erosion)
180 Screening models (desktop models; models are not calibrated or verified)
190 Biological/habitat data extrapolated from upstream or downstream waterbody
191 Physical/chemical data extrapolated from upstream or downstream waterbody

200 Physical/chemical monitoring[b]
210 Fixed-station physical/chemical monitoring, conventional pollutants only
211 Highest quality fixed-station physical/chemical monitoring, conventional pollutants; frequency and coverage sufficient to capture acute and chronic events, key periods, high and low flows
220 Non-fixed-station physical/chemical monitoring, conventional pollutants only
222 Non-fixed-station monitoring, conventional, during key seasons and flows
230 Fixed-station physical/chemical monitoring, conventional plus toxic pollutants
231 Highest quality fixed-station physical/chemical monitoring, conventional plus toxicants; frequency and coverage sufficient to capture acute and chronic events, key periods, high and low flows
240 Non-fixed-station physical/chemical monitoring, conventional plus toxic pollutants
242 Non-fixed-station physical/chemical monitoring, conventional plus toxicants, during key seasons and flows
250 Chemical monitoring of sediments
260 Fish tissue analysis
270 Community water supply chemical monitoring (ambient water)
275 Community water supply chemical monitoring (finished water)

300 Biological monitoring[b]
310 Ecological/habitat surveys
314 Exceptional waters
315 Reference reach waters
316 OSRW (Outstanding State Resource Waters)
320 Benthic macroinvertebrate surveys
321 RBP III or equivalent benthos surveys
322 RBP I or II or equivalent benthos surveys
330 Fish surveys
331 RBP V or equivalent fish surveys
340 Primary producer surveys (phytoplankton, periphyton, and/or macrophyton)
350 Fixed-station biological monitoring

360 Habitat assessment
365 Visual observation, usually at road crossings; professional not required
370 Visual observation, use of land use maps, reference conditions, professional not required
375 Visual observation, may quantify some parameters; single season typically; by professional
380 Quantitative measurements of instream parameters, channel morphology, floodplain; one or two seasons; by professional

400 Pathogen monitoring[b]
410 Shellfish surveys
420 Water column surveys (e.g., fecal coliform)
430 Sediment analysis
440 Community water supply pathogen monitoring (ambient water)
450 Community water supply pathogen monitoring (finished water)

600 Modeling[c]
610 Calibrated models (calibration data are less than five years old)

700 Integrated intensive survey[b] (field work exceeds one 24-hour period and multiple media are sampled)
710 Combined sampling of water column, sediment, and biota for chemical analysis
720 Biosurveys of multiple taxonomic groups (e.g., fish, invertebrates, algae)

Assessments Based on Data from Other Sources
800 Assessments based on data from other sources[c]
810 Chemical/physical monitoring data by quality-assured volunteer program
820 Benthic macroinvertebrate surveys by quality-assured volunteer program
830 Bacteriological water column sampling by quality-assured volunteer program
840 Discharger self-monitoring data (effluent)
850 Discharger self-monitoring data (ambient)
860 Monitoring data collected by other agencies or organizations (use the assessment comment field to list other agencies
875 Public water systems (PWS) reported data

Discrepancy in Aquatic Life Assessment Results[d]

900 Discrepancy in Aquatic Life Assessment Results
910 Discrepancy among different data types; aquatic life assessment is based on physical/chemical data
920 Discrepancy among different data types; aquatic life assessment is based on biological data
925 Discrepancy among different data types; aquatic life assessment is based on habitat data
930 Discrepancy among different data types; aquatic life assessment is based on toxicity testing data
940 Discrepancy among different data types; aquatic life assessment is based on qualitative (evaluated) assessment data

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[a]Generally considered to be evaluated assessment types.
[b]Generally considered to be monitored assessment types.
[c]Considered to be monitored or evaluated assessment types depending on data quality and State assessment protocols.
[d]States are requested to use these codes to identify cases when biological, habitat, toxicity, and/or physical/chemical data show different assessment results.

Appendix D

Causes (Pollutants) and Sources with ADB Codes

Table 1. Causes (pollutants) and assessment database codes used under Section 305(b) water quality assessment (modified from ADB).

Cause (Pollutant)	Cause Code
.alpha.-BHC	01
.alpha.-Endosulfan(Endosulfan 1)	02
.beta.-BHC	03
.beta.-Endosulfan (Endosulfan 2)	04
.delta.-BHC	05
1,1,1,2-Tetrachloroethane	06
1,1,1-Trichloroethane[1]	07
1,1,2,2-Tetrachloroethane[1]	08
1,1,2-Trichloroethane[1]	09
1,1-Dichloro-1,2,2-trifluoroethane	10
1,1-Dichloroethane[1]	11
1,2,3,4-Tetrachlorobenzene	12
1,2,4,5-Tetrachlorobenzene[1]	13
1,2,4-Trichlorobenzene[1]	14
1,2,4-Trimethylbenzene	15
1,2-Butylene oxide	16
1,2-Dibromo-3-chloropropane	17
1,2-Dibromo-3-chloropropane (DBCP)	18
1,2-Dichloroethane[1]	19
1,2-Dichloroethylene	20
1,2-Dichloropropane[1]	21
1,2-Diphenylhydrazine[1]	22
1,3-Butadiene	23
1,3-Dichloropropene	24
1,4-Dioxane	25
2,2'-Dichlorodiethyl ether	26
2,2'-Dichlorodiisopropyl ether	27
2,3,7,8-Tetrachlorodibenzofuran	28
2,3-Dichloropropene	29
2,4,5-TP (Silvex)[1]	30
2,4,5-Trichlorophenol[1]	31
2,4,6-Trichlorophenol	33
2,4-D[1]	34
2,4-Diaminotoluene	35
2,4-Dichlorophenol[1]	36
2,4-Dimethylphenol[1]	37
2,4-Dinitrophenol[1]	38
2,4-Dinitrotoluene[1]	39
2,5-Dichlorophenol	40
2,6-Dinitrotoluene	41
2-Acetylaminofluorene	42
2-Chloroethyl vinyl ether	43
2-Chloronaphthalene[1]	44
2-Chlorophenol[1]	45
2-Ethoxyethanol	46

[1]Pollutant tied to human health criterion only in regulation, 401 KAR 10:031
[2]Should only be used as last option when impairment exists and no pollutant can be identified

--Pollution—

Definition of pollution under the CWA (Section 502[19]): *The man-made or man-induced alteration of the chemical, physical, biological, and radiological integrity of water.*

The following is a list of measurements and categories considered pollution. There are ADB codes for these, but in and of themselves do not constitute a pollutant; therefore, they will not be included in a 303(d) listing, nor result in a TMDL.

Table 2. Pollution and assessment database codes used under Section 305(b) water quality assessment (modified from ADB).

Pollution	ADB Code
Abnormal fish histology (lesions)	67
Alteration in stream-side or littoral vegetative covers	84
Alterations in wetland habitats	85
Atlantic sea lamprey, *Petromyzon marinus*	98
Benthic macroinvertebrate bioassessments	105
Chlorophyll-a	150
Combination benthic/fishes bioassessments	161
Combined biota/habitat bioassessments	162
Dissolved oxygen saturation	205
Eurasion Water Milfoil, *Myriophyllum spicatum*	206
Estuarine bioassessments	218
Eurasian water milfoil, *Myriophyllum spicatum*	226
Excess algal growth	227
Fish passage barrier	228
Fish kills	229
Fishes bioassessments	230
Habitat assessment (streams)	243
Lake bioassessments	266
Low flow alterations	270
Non-native fish, shellfish, or zooplankton	313
Other anthropogenic substrate alterations	318
Other flow regime alterations	319
Periphyton (aufwuchs) indicator bioassessments	336
Secchi disk transparency	368
Suspended algae	387
Trophic state index	412
Zebra mussel, *Dreissena polymorph*	422
Abnormal fish deformities, erosions, lesions, tumors (DELTS)	445
Habitat assessment (lakes)	446
High flow regime	450
Aquatic plants - native	460
Fish advisory - no restriction	465
Sediment screening value (exceedence)	466
Bottom deposits	471

Table 3. Probable sources of impairment to Kentucky rivers and streams.

Source Group	Source ID	Source
Agriculture		
	4	Animal feeding operations (NPS)
	5	Animal shows and racetracks
	6	Aquaculture (not permitted)
	7	Aquaculture (permitted)
	11	Auction barns & off-farm animal holding/management area
	30	Crop production with subsurface drainage
	31	Dairies (outside milk parlor areas)
	46	Grazing in riparian or shoreline zones
	73	Managed pasture grazing
	87	Non-irrigated crop production
	100	Permitted runoff from Confined Animal Feeding Operations (CAFOs)
	108	Rangeland grazing
	123	Specialty crop production
	143	Livestock (grazing or feeding operations)
	144	Crop production (crop land or dry land)
	156	Agriculture
	161	Pesticide application
	173	Manure runoff
	174	Unrestricted cattle access
	179	Lake fertilization
Non-Point Sources		
	8	Atmospheric deposition - acidity
	9	Atmospheric deposition - nitrogen
	10	Atmospheric deposition - toxics
	16	Cercla NPL (superfund) sites
	24	Commercial districts (industrial parks)
	26	Commercial districts (shopping/office Complexes)
	67	Land application of wastewater (non-agricultural)
	68	Land application of wastewater biosolids (non-agricultural)
	84	Municipal (urbanized high density area)
	92	On-site treatment systems (septic & similar decencentralized systems)
	97	Other spill related impacts
	107	Post-development erosion and sedimentation
	111	Residential districts
	122	Site clearance (land development or redevelopment)
	130	Unpermitted discharge (domestic wastes)
	131	Unpermitted discharge (industrial/commercial Wastes)
	133	Wastes from pets
	134	Waterfowl
	136	Wildlife other than waterfowl
	141	Non-point source
	146	Sources outside state jurisdiction or borders
	153	Wet weather discharges (non-point source)

	161	Pesticide application
	162	Watershed runoff following forest fire
	169	Unspecified urban stormwater
	171	Unspecified land disturbance
	175	Contaminated groundwater
	177	Urban runoff/storm sewers
	181	Runoff from forest/grassland/parkland
Habitat Impacts		
	19	Channel erosion/incision from upstream hydromodifications
	20	Channelization (canalization)
	21	Clean sediments
	36	Drainage/filling/loss of wetlands
	38	Dredging (e.g., for navigation channels)
	42	Flow alterations from water diversions
	44	Freshettes or major flooding
	51	Historic bottom deposits (not sediment)
	52	Hydrostructure impacts on fish passage
	71	Littoral/shore area modifications (non-riverine)
	72	Loss of riparian habitat
	125	Streambank modifications/destablization
	132	Upstream impoundments (e.g., Pl-566 NRCS structures)
	157	Habitat modification - other than hydromodification
	163	Low water crossing
	187	Shallow lake or reservoir basin
Silviculture		
	43	Forest roads (road construction and use)
	101	Permitted silvicultural activities
	118	Silviculture - large scale (industrial) unpermitted forestry
	119	Silviculture harvesting
	120	Silviculture plantation management
	121	Silviculture reforestation
	137	Woodlot site clearance (majority of KY forestland in private ownership)
	138	Woodlot site management (sm. private tree farms)
	158	Siliviculture, fire suppression
	161	Pesticide application
	162	Watershed runoff following Forest Fire
	166	Silviculture activities
Resource Extraction		
	37	Dredge mining (e.g., coal removal from Big Sandy R. channel)
	2	Acid mine drainage
	22	Coal mining discharges (permitted)
	47	Hardrock Mining Discharges (Permitted)
	48	Heap-leach extraction mining
	56	Impacts from abandoned mine lands (inactive)
	82	Mine tailings
	83	Mountaintop mining

	93	Open-pit mining
	102	Petroleum/natural gas activities
	103	Petroleum/natural gas production activities (permitted)
	105	Placer mining
	114	Sand/gravel/rock mining or quarries
	126	Subsurface (hardrock) mining
	127	Surface mining
	159	Reclamation of inactive mining
	165	Coal mining
	172	Potash mining
	178	Coal mining (subsurface)
	186	Legacy coal extraction
Municipal Point Sources		
	23	Combined sewer overflows
	33	Discharges from biosolids (SLUDGE) storage, application or disposal
	34	Discharges from Municipal Separate Storm Sewer Systems (MS4)
	85	Municipal point source discharges
	86	Municipal point source impacts from Inadequate Industrial/Commercial Pretreatment
	99	Package plant or other permitted small flows discharges
	115	Sanitary sewer overflows (collection system failures)
	128	Total retention domestic sewage lagoons
	135	Wet weather discharges (point source and combination of stormwater,
		SSO or CSO)
Transportation		
	3	Airports
	12	Ballast water releases
	15	Cargo loading/unloading
	25	Commercial ferries
	49	Highway/road/bridge runoff (non-construction related)
	50	Highways, roads, bridges, infrastructure (new construction)
	112	Salt storage sites
	124	Spills from trucks or trains
	170	Unspecified unpaved road or trail
Industrial Sources		
	61	Industrial land treatment
	62	Industrial point source discharge
	63	Industrial thermal discharges
	64	Industrial/commercial site stormwater discharge (permitted)
	122	Site Clearance (land development or redevelopment)
Recreation Sources		
	95	Other recreational pollution sources
	45	Golf courses
	60	Impacts from resort areas (winter and non-winter resorts)

	91	Off-road vehicles
	106	Pollutants from public bathing areas
	181	Runoff from forest/grassland/parkland
Sediments		
	28	Contaminated sediments
	65	Internal nutrient recycling
	148	Sediment re-suspension (clean sediment)
	149	Sediment re-suspension (contaminated sediment)
Marina/Boating Sources		
	74	Marina boat construction
	75	Marina boat maintenance
	76	Marina dredging operations
	77	Marina fueling operations
	78	Marina-related shoreline erosion
	79	Marina/boating pumpout releases
	80	Marina/boating sanitary on-vessel discharges
	94	Other Marina/Boating On-vessel Discharges
	117	Shipbuilding, repairs, drydocking
	184	Marina related shoreline habitat degradation
Water Quantity or Withdrawal		
	13	Baseflow depletion from groundwater withdrawals
	113	Saltwater intrusion from groundwater overdrafting
	152	Transfer of water from an outside watershed
Permitted Sources (other)		
	1	Above ground storage tank leaks (tank farms)
	8	Atmospheric deposition – acidity
	9	Atmospheric deposition - nitrogen
	10	Atmospheric deposition - toxics
	27	Construction stormwater discharge (permitted)
	69	Landfills
	70	Leaking underground storage tanks
	109	RCRA hazardous waste sites
	146	Sources outside state jurisdiction or borders
	153	Wet weather discharges (non-point source)
	175	Contaminated groundwater
Inappropriate or Illegal		
Waste Disposal		
	54	Illegal dumps or other inappropriate waste disposal
	55	Illicit connections/hook-ups to storm sewers
	116	Septage disposal

	130	Unpermitted discharge (domestic wastes)
	160	Inappropriate waste disposal
	167	Unspecified domestic waste (e.g. straight-pipes)
Preferred over 167	168	Sewage discharges in unsewered areas
Other		
	17	Changes in ordinary stratification and bottom water hypoxia/anoxia
	39	Drought-related impacts
	57	Impacts from geothermal development
	65	Internal nutrient recycling
	92	**On-site treatment systems (septic & similar decencentralized systems)**
	140	Source unknown
	145	Natural conditions - water quality standards use attainability analyses needed
	147	Upstream source
	150	Forced drainage pumping
	151	Naturally occurring organic acids
	154	Upstream/downstream source
	155	Natural sources
	176	Rural (residential areas)
	180	Introduction of non-native organisms (accidental or intentional)
	185	Fire retardant slurry
	187	Shallow lake/reservoir basin

ANDY BESHEAR
GOVERNOR

REBECCA W. GOODMAN
SECRETARY

ANTHONY R. HATTON
COMMISSIONER

ENERGY AND ENVIRONMENT CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION

300 SOWER BOULEVARD
FRANKFORT, KENTUCKY 40601
TELEPHONE: 502-564-2150
TELEFAX: 502-564-4245

January 28, 2022

Jeaneanne M. Gettle, Director
Water Division
U.S. EPA Region 4
61 Forsyth Street, SW
Atlanta, Georgia 30303

RE: Kentucky Division of Water's Submittal of the 2018-2020 Combined Cycle Integrated Report

Dear Ms. Gettle,

The Kentucky Division of Water is pleased to submit the 2018-2020 Combined Cycle Integrated Report for EPA's review and the 303(d) list for approval. The public comment period for the 303(d) list ended August 3, 2021.

Submittal of this combined reporting cycle to ATTAINS includes the following:

- 2018-2020 Combined Cycle Integrated Report (Volume I and II requirements incorporated)
  - Response to Public Comments Received included in Appendix B
- 305(b) Workbook in Microsoft Excel Format, which includes the 305(b) and 303(d) lists
- Consolidated Assessment and Listing Methodology (CALM)
- Addendum to the CALM for an Updated Fish Consumption Methodology
- Kentucky Division of Water 305(b) geospatial files
- Other supporting documentation as it pertains to this cycle

The Division is committed to TMDL development for the protection of Kentucky's surface water resources and looks forward to working with EPA Region 4 as we continue to advance our TMDL program. Your expeditious review of this submittal package and subsequent approval of the 303(d) list are greatly appreciated.

If you have questions or concerns regarding the Integrated Report, please do not hesitate to contact Melanie Arnold, manager of the Water Quality Branch at (502) 782-6879.

Sincerely,

Carey Johnson, Director
Kentucky Division of Water

c: Melanie Arnold, Water Quality Branch Manager
Katie McKone, 305(b) Coordinator
Lara Panayotoff, TMDL Section Supervisor
TMDL Administrative File

From:	McKone, Katie (EEC)
To:	Stebbins, Margaret
Subject:	FW: ATTAINS Notification: Cycle 2020 for Kentucky has Changed Status to Organization Final Action - Submittal.
Date:	Friday, January 28, 2022 10:17:42 AM

Margaret - apologies, I cc'ed your ky.gov email instead of your epa.gov email.

-----Original Message-----
From: Danois, Gracy R. <Danois.Gracy@epa.gov>
Sent: Friday, January 28, 2022 10:14 AM
To: McKone, Katie (EEC) <Katie.McKone@ky.gov>
Cc: Arnold, Melanie (EEC) <Melanie.Arnold@ky.gov>; Panayotoff, Lara A (EEC) <lara.panayotoff@ky.gov>; Webb, John S (EEC) <John.Webb@ky.gov>; Johnson, Carey M (EEC) <Carey.Johnson@ky.gov>; Stebbins, Margaret (EEC) <margaret.stebbins@ky.gov>
Subject: RE: ATTAINS Notification: Cycle 2020 for Kentucky has Changed Status to Organization Final Action - Submittal.

Yay!!!

This is cause for celebration!!! I thank you all for your dedication and hard work to complete this action.

Gracy

Gracy R. Danois, Acting Chief
Water Quality Planning Branch
Water Division

US EPA Region 4
61 Forsyth St., SW
Atlanta, GA 30303

404-562-9119
470-259-9812 (mobile)

-----Original Message-----
From: McKone, Katie (EEC) <Katie.McKone@ky.gov>
Sent: Friday, January 28, 2022 10:02 AM
To: Danois, Gracy R. <Danois.Gracy@epa.gov>
Cc: Arnold, Melanie (EEC) <melanie.arnold@ky.gov>; Lara Panayotoff <lara.panayotoff@ky.gov>; Webb, John S (EEC) <John.Webb@ky.gov>; Carey Johnson <carey.johnson@ky.gov>; Stebbins, Margaret (EEC) <margaret.stebbins@ky.gov>
Subject: FW: ATTAINS Notification: Cycle 2020 for Kentucky has Changed Status to Organization Final Action - Submittal.

Gracy,

I'm happy to inform you that Kentucky promoted their 2018/2020 cycle in ATTAINS this morning. Please find attached our submittal letter for your records, which is also attached as a document to the cycle in ATTAINS.

If there's anything we can do to facilitate your review process, please don't hesitate to reach out. Many thanks to you and all the EPA staff who helped us through this journey.

All the best,
Katie

-----Original Message-----
From: attains@attainsprod.epa.gov <attains@attainsprod.epa.gov>
Sent: Friday, January 28, 2022 9:47 AM
To: McKone, Katie (EEC) <Katie.McKone@ky.gov>
Subject: ATTAINS Notification: Cycle 2020 for Kentucky has Changed Status to Organization Final Action - Submittal.

Cycle 2020 for Kentucky (21KY) has Changed Status from "Organization Draft" to "Organization Final Action - Submittal" by Katie McKone and is now in EPA's queue.

This message was sent to katie.mckone@ky.gov from the ATTAINS system on 01/28/2022 at 09:46:57.